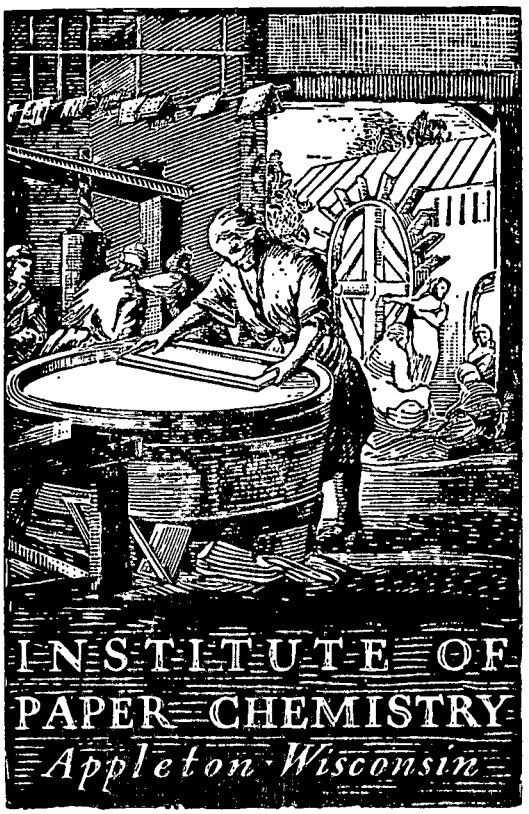


BASE-LINE

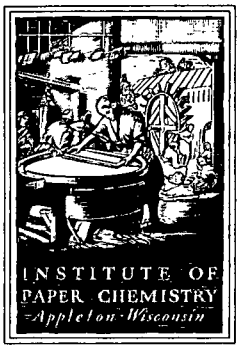
4th Quarter, 1979

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR OCTOBER, NOVEMBER, DECEMBER, 1979)

Project 2694-1

Report Seventy-Four
A Progress Report
to
FOURDRINIER KRAFT BOARD GROUP
OF THE
AMERICAN PAPER INSTITUTE

February 29, 1980



THE INSTITUTE OF PAPER CHEMISTRY
Post Office Box 1039
Appleton, Wisconsin 54912
Phone: 414/734-9251

February 29, 1980

Project 2694-1

Dear Sir:

We are enclosing a copy of the following report to the Fourdrinier Kraft Board Group of the American Paper Institute:

> Report Seventy-Four, Project 2694-1, a progress report entitled "Continuous Baseline Study (Modified); Mill Linerboard Data for October, November, December, 1979" dated February 29, 1980.

The code identities for paper machines in your company from which data were submitted for evaluation are given on the inside of the front cover of this report.

Sincerely,

William J. Whitsitt
Research Associate
Paper Materials & Systems Division

WJW/fcg
Enclosure

MacMillan Bloedel Ltd.

Your paper machines are identified by the following code letters in this report

Pine Hill No. 1 F1

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR OCTOBER, NOVEMBER, DECEMBER, 1979)

Project 2694-1

Report Seventy-Four

A Progress Report

to

FOURDRINIER KRAFT BOARD GROUP

OF THE

AMERICAN PAPER INSTITUTE

February 29, 1980

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THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR OCTOBER, NOVEMBER, DECEMBER, 1979)

SUMMARY

PART I: SUMMARY OF MOISTURE CONTENT DATA (SEPTEMBER-DECEMBER, 1979)

Linerboard Grade Wt.		Moisture Content			
		September	October	November	December
26 Lb	Max.[a]	6.9	6.1	6.7	6.5
	Min.[a]	3.2	3.0	3.2	3.7
	Av.[b]	4.8 (13)	4.8 (14)	4.7 (16)	4.9 (12)
33 Lb	Max.[a]	6.4	6.1	6.3	6.3
	Min.[a]	2.0	1.8	1.8	2.1
	Av.[b]	4.9 (28)	4.8 (23)	4.8 (26)	4.9 (26)
38 Lb	Max.[a]	6.8	6.5	6.4	6.6
	Min.[a]	3.8	4.5	4.4	4.3
	Av.[b]	5.3 (21)	5.3 (22)	5.3 (20)	5.3 (21)
42 Lb	Max.[a]	6.9	7.1	6.7	6.8
	Min.[a]	3.8	3.0	3.5	3.5
	Av.[b]	5.6 (43)	5.7 (41)	5.6 (39)	5.6 (39)
69 Lb	Max.[a]	7.9	7.7	7.8	7.5
	Min.[a]	4.6	4.4	4.2	4.3
	Av.[b]	6.4 (27)	6.4 (28)	6.4 (25)	6.4 (27)
90 Lb	Max.[a]	7.4	7.1	8.2	7.7
	Min.[a]	4.9	5.1	5.5	5.8
	Av.[b]	6.5 (14)	6.3 (13)	6.6 (11)	6.6 (9)

[a] Current machine average.

[b] Current FKBG average, number of machines is indicated in parentheses.

PART II: SUMMARY OF ADJUSTED BASIS WEIGHT DATA
(SEPTEMBER-DECEMBER, 1979)

Linerboard Grade Wt.		Adjusted Basis Weight, lb/M ft^2			
		September	October	November	December
26 Lb	Max.[a]	27.2	27.3	27.2	27.4
	Min.[a]	26.1	26.0	26.1	26.1
	Av.[b]	26.5 (13)	26.4 (14)	26.5 (16)	26.6 (12)
33 Lb	Max.[a]	34.4	34.8	34.5	35.2
	Min.[a]	33.0	32.7	33.0	32.9
	Av.[b]	33.6 (28)	33.5 (23)	33.5 (26)	33.6 (26)
38 Lb	Max.[a]	39.5	39.4	39.1	39.8
	Min.[a]	37.9	38.0	38.1	38.1
	Av.[b]	38.5 (21)	38.5 (22)	38.4 (20)	38.5 (21)
42 Lb	Max.[a]	43.4	43.2	42.9	43.0
	Min.[a]	41.6	41.8	41.7	42.0
	Av.[b]	42.4 (43)	42.3 (41)	42.3 (39)	42.4 (39)
69 Lb	Max.[a]	70.3	70.6	70.2	70.3
	Min.[a]	68.3	68.5	68.3	68.7
	Av.[b]	69.4 (27)	69.3 (28)	69.3 (25)	69.4 (27)
90 Lb	Max.[a]	91.2	92.1	92.0	91.9
	Min.[a]	89.4	89.5	89.5	90.0
	Av.[b]	90.4 (14)	90.6 (13)	90.7 (11)	90.8 (9)

[a] Current machine average.

[b] Current FKBG average, number of machines is indicated in parentheses.

PART III: SUMMARY OF CALIPER DATA (SEPTEMBER-DECEMBER, 1979)

Linerboard Grade Wt.		Caliper, pt. September	October	November	December
26 Lb	Max.[a]	8.9	9.3	9.2	9.0
	Min.[a]	7.1	6.9	7.0	7.0
	Av.[b]	8.1 (13)	8.0 (14)	8.1 (16)	8.0 (12)
33 Lb	Max.[a]	11.2	11.3	11.5	10.9
	Min.[a]	9.1	8.9	8.9	8.7
	Av.[b]	9.9 (27)	9.8 (22)	10.0 (24)	9.9 (25)
38 Lb	Max.[a]	12.4	12.0	11.5	11.6
	Min.[a]	9.8	10.0	9.9	9.1
	Av.[b]	11.0 (20)	11.0 (21)	11.0 (19)	10.8 (20)
42 Lb	Max.[a]	13.8	13.7	13.1	13.8
	Min.[a]	10.8	10.9	10.7	11.0
	Av.[b]	12.1 (42)	12.1 (39)	12.1 (38)	12.1 (38)
69 Lb	Max.[a]	22.1	23.1	22.0	21.8
	Min.[a]	18.5	18.4	18.5	18.5
	Av.[b]	20.0 (27)	20.0 (27)	19.9 (25)	20.0 (26)
90 Lb	Max.[a]	27.7	30.1	27.4	27.1
	Min.[a]	24.2	24.4	23.3	23.9
	Av.[b]	26.0 (14)	26.2 (12)	25.5 (11)	25.5 (9)

[a] Current machine average.

[b] Current FKBG average, number of machines is indicated in parentheses.

PART IV: SUMMARY OF BURSTING STRENGTH DATA (SEPTEMBER-DECEMBER, 1979)

Linerboard Grade Wt.		Bursting Strength, psig			
		September	October	November	December
26 Lb	Max.[a]	78	78	79	78
	Min.[a]	63	62	61	63
	Av.[b]	69 (13)	69 (14)	69 (16)	68 (12)
33 Lb	Max.[a]	98	96	96	99
	Min.[a]	75	75	78	78
	Av.[b]	85 (28)	85 (23)	84 (26)	84 (26)
38 Lb	Max.[a]	104	107	102	105
	Min.[a]	87	86	88	87
	Av.[b]	97 (21)	97 (22)	95 (20)	97 (21)
42 Lb	Max.[a]	119	113	110	111
	Min.[a]	97	96	96	93
	Av.[b]	105 (43)	104 (41)	103 (39)	103 (39)
69 Lb	Max.[a]	151	149	152	154
	Min.[a]	127	133	129	128
	Av.[b]	139 (27)	140 (28)	139 (25)	140 (27)
90 Lb	Max.[a]	190	183	184	176
	Min.[a]	159	157	155	157
	Av.[b]	170 (14)	170 (13)	167 (11)	168 (9)

[a] Current machine average.

[b] Current FKBG average, number of machines is indicated in parentheses.

INTRODUCTION

The continuous base-line study (modified) is a compilation of monthly averages of mill test data obtained routinely on six major grade weights of linerboard manufactured in the member mills of F.K.B.G. Mill data are included for moisture content, basis weight, caliper, and bursting strength tests made on the production of individual machines which produced at least 500 tons of one or more of the following six major grade weights during a given month: 26, 33, 38, 42, 69, and 90 lb. At the Institute, the as-reported basis weight, corresponding to the as-reported moisture content, is adjusted to a moisture content of 7.8%. Both the as-reported and the adjusted basis weight averages are included in the report. Note that the moisture content at the as-reported basis weight (not shown in tables) does not necessarily agree with the moisture content indicated in the report as measured at the reel. This is because some mills measure their basis weight at other than reel or standard conditions. The as-reported basis weight is included in the tables for reference only and should not be used for comparison purposes.

PRESENTATION OF DATA

For the six major grade weights of linerboard referred to earlier, mill test averages for moisture content, basis weight (reported and adjusted), caliper, and bursting strength are compiled in the following tables.

Table Number	Description
I-II-III	Mill Test Averages on 26-lb Linerboard
IV-V-VI	Mill Test Averages on 33-lb Linerboard
VII-VIII-IX	Mill Test Averages on 38-lb Linerboard
X-XI-XII	Mill Test Averages on 42-lb Linerboard
XIII-XIV-XV	Mill Test Averages on 69-lb Linerboard
XVI-XVII-XVIII	Mill Test Averages on 90-lb Linerboard

TABLE I

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB FOURDRINIER KRAFT LINERBOARD

OCTOBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	4.1	4.6	89.1	85.4	25.3	25.9	97.7	97.3	26.3	26.8	98.1	99.2	8.0	7.9	101.3	98.8	70	71	98.6	100.0
B1	5.4	5.5	98.2	112.5	25.9	26.1	99.2	99.6	26.0	26.2	99.2	98.1	8.4	8.2	102.4	103.7	68	68	100.0	97.1
C1	3.0	3.4	88.2	62.5	26.1	26.0	100.4	100.4	26.2	26.1	100.4	98.9	8.1	7.8	103.8	100.0	78	69	113.0	111.4
E1		4.0				25.4				26.4				8.0				75		
I1		6.1				25.7				26.2				8.5				76		
J1		3.8				27.2				27.3				8.6				69		
L1		4.0				25.5				26.5				7.7				76		
Q1		5.4				25.4				26.0				7.8				73		
R1	5.9	5.7	103.5	122.9	26.1	26.0	100.4	100.4	26.2	26.1	100.4	98.9	7.4	7.8	94.9	91.4	62	62	100.0	88.6
T1	4.2	3.8	110.5	87.5	26.3	26.5	99.2	101.2	26.4	26.6	99.2	99.6	8.4	7.8	107.7	103.7	71	70	101.4	101.4
U1	5.0	4.8	104.2	104.2	26.2	26.2	100.0	100.8	26.3	26.3	100.0	99.2	7.8	8.1	96.3	96.3	74	72	102.8	105.7
V1		2.6				25.3				26.7				7.6				76		
W1	4.8	4.9	98.0	100.0	25.6	25.6	100.0	98.5	26.4	26.4	100.0	99.6	8.1	8.2	98.8	100.0	70	70	100.0	100.0
X1	4.7	5.1	92.2	97.9	25.4	25.8	98.4	97.7	26.3	26.6	98.9	99.2	8.0	8.5	94.1	98.8	67	70	95.7	95.7
Y1	4.0	4.1	97.6	83.3	26.7	26.6	100.4	102.7	26.8	26.8	100.0	101.1	7.8	8.0	97.5	96.3	67	68	98.5	95.7
A2	4.4	3.9	112.8	91.7	25.5	25.5	100.0	98.1	26.4	26.6	99.2	99.6	8.4	8.6	97.7	103.7	77	80	96.2	110.0
B2		5.9				25.5				26.0				8.2				75		
F2	6.0	5.9	101.7	125.0	26.8	26.6	100.8	103.1	27.3	27.2	100.4	103.0	8.3	8.1	102.5	102.5	63	66	95.4	90.0
N2		4.4				26.2				27.2				7.6				70		
P2	6.1	6.1	100.0	127.1	26.3	25.9	101.5	101.2	26.4	26.0	101.5	99.6	6.9	7.1	97.2	85.2	62	61	101.6	88.6
S2	5.4	5.0	108.0	112.5	26.2	26.1	100.4	100.8	26.9	26.9	100.0	101.5	9.3	9.1	102.2	114.8	70	70	100.0	100.0
U2		6.7				26.0				26.2				7.2				64		
Y2		5.3				26.6				27.3				8.9				67		
B3		5.1				25.5				26.3				7.9				76		
C3	4.7	4.7	100.0	97.9	25.2	25.6	98.4	96.9	26.1	26.5	98.5	98.5	7.3	7.9	92.4	90.1	70	70	100.0	100.0
FKBG DATA																				
CUR. AV.	4.8				26.0				26.4				8.0				69			
CUM. AV.	4.8				26.0				26.5				8.1				70			
IND. *C	100.0				100.0				99.6				98.8				98.6			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE II

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	3.9	4.6	84.8	81.2	25.5	25.8	98.8	98.1	26.6	26.7	99.6	100.4	8.0	7.9	101.3	98.8	69	70	98.6	98.6
B1	5.0	5.5	90.9	104.2	26.1	26.1	100.0	100.4	26.2	26.2	100.0	98.9	8.7	8.3	104.8	107.4	66	68	97.0	94.3
C1	3.2	3.3	97.0	66.7	26.0	26.0	100.0	100.0	26.1	26.1	100.0	98.5	8.2	7.8	105.1	101.2	70	70	100.0	100.0
E1		4.0				25.2				26.2				8.0				75		
I1	5.8	6.0	96.7	120.8	25.7	25.7	100.0	98.8	26.3	26.2	100.4	99.2	8.3	8.6	96.5	102.5	79	76	103.9	112.8
J1		3.8				27.2				27.3				8.4				68		
L1		4.0				25.5				26.6				7.8				75		
Q1		5.4				25.3				26.0				7.8				73		
R1		5.8				26.0				26.1				7.7				62		
T1	3.4	3.8	89.5	70.8	26.2	26.5	98.9	100.8	26.3	26.6	98.9	99.2	7.9	7.9	100.0	97.5	71	70	101.4	101.4
U1	4.9	4.8	102.1	102.1	26.1	26.2	99.6	100.4	26.2	26.3	99.6	98.9	7.7	8.0	96.2	95.1	73	72	101.4	104.3
V1		2.6				25.4				26.8				7.6				75		
W1	4.9	4.9	100.0	102.1	25.6	25.6	100.0	98.5	26.4	26.4	100.0	99.6	7.8	8.2	95.1	96.3	66	70	94.3	94.3
X1	5.0	5.0	100.0	104.2	25.8	25.8	100.0	99.2	26.6	26.6	100.0	100.4	8.1	8.5	95.3	100.0	74	70	105.7	105.7
Y1	3.8	4.1	92.7	79.2	26.5	26.7	99.2	101.9	26.6	26.8	99.2	100.4	8.4	8.0	105.0	103.7	66	68	97.0	94.3
A2	4.0	3.9	102.6	83.3	25.3	25.5	99.2	97.3	26.3	26.6	98.9	99.2	8.7	8.6	101.2	107.4	75	79	94.9	107.1
B2		5.9				25.5				26.0				8.2				75		
F2	5.8	6.0	96.7	120.8	26.3	26.7	98.5	101.2	26.9	27.2	98.9	101.5	7.9	8.2	96.3	97.5	63	64	98.4	90.0
N2	4.0	4.4	90.9	83.3	26.1	26.2	99.6	100.4	27.2	27.2	100.0	102.6	8.1	7.6	106.6	100.0	70	70	100.0	100.0
P2		6.1				26.0				26.1				7.1				61		
S2	4.9	5.0	98.0	102.1	26.3	26.1	100.8	101.2	27.1	26.8	101.1	102.3	9.2	9.1	101.1	113.6	69	70	98.6	98.6
U2	6.7	6.7	100.0	139.6	26.0	26.0	100.0	100.0	26.1	26.2	99.6	98.5	7.0	7.2	97.2	86.4	61	64	95.3	87.1
Y2	5.0	5.3	94.3	104.2	25.9	26.6	97.4	99.6	26.7	27.3	97.8	100.8	8.6	8.9	96.6	106.2	65	66	98.5	92.8
B3		5.1				25.5				26.3				7.9				76		
C3	5.2	4.7	110.6	108.3	25.6	25.6	100.0	98.5	26.3	26.5	99.2	99.2	7.7	7.9	97.5	95.1	68	70	97.1	97.1
FKBG DATA																				
CUR. AV.	4.7				25.9				26.5				8.1				69			
CUM. AV.	4.8				26.0				26.5				8.1				70			
IND. *C	97.9				99.6				100.0				100.0				98.6			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE III

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB FOURDRINIER KRAFT LINERBOARD

DECEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	4.2	4.5	93.3	87.5	25.5	25.8	98.8	98.1	26.5	26.7	99.2	100.0	8.0	7.9	101.3	98.8	66	70	94.3	94.3
B1		5.4				26.1				26.2				8.3				68		
C1	3.7	3.3	112.1	77.1	26.1	26.0	100.4	100.4	26.2	26.1	100.4	98.9	8.3	7.8	106.4	102.5	69	70	98.6	98.6
E1		4.0				25.2				26.2				8.0				75		
I1		6.0				25.7				26.2				8.5				76		
J1		3.8				26.9				27.0				8.3				69		
L1		4.0				25.6				26.7				7.7				76		
Q1		5.4				25.3				26.0				7.8				73		
R1		5.8				26.0				26.1				7.7				62		
T1	3.9	3.8	102.6	81.2	26.1	26.4	98.9	100.4	26.2	26.5	98.9	98.9	7.8	7.9	98.7	96.3	72	70	102.8	102.8
U1	4.9	4.9	100.0	102.1	26.3	26.2	100.4	101.2	26.4	26.3	100.4	99.6	8.0	8.0	100.0	98.8	78	72	108.3	111.4
V1		2.5				25.4				26.8				7.5				74		
W1	4.8	4.9	98.0	100.0	25.7	25.6	100.4	98.8	26.5	26.4	100.4	100.0	7.8	8.1	96.3	96.3	67	69	97.1	95.7
X1	5.7	5.0	114.0	118.8	25.7	25.8	99.6	98.8	26.3	26.6	98.9	99.2	8.0	8.4	95.2	98.8	71	70	101.4	101.4
Y1	4.1	4.1	100.0	85.4	27.3	26.6	102.6	105.0	27.4	26.7	102.6	103.4	8.2	8.0	102.5	101.2	67	68	98.5	95.7
A2		3.9				25.5				26.6				8.6				78		
B2		6.0				25.5				26.0				8.2				75		
F2	6.1	5.9	103.4	127.1	25.9	26.6	97.4	99.6	26.4	27.1	97.4	99.6	7.8	8.1	96.3	96.3	63	64	98.4	90.0
M2	5.5			114.6	26.0			100.0	26.6			100.4	8.8			108.6	64			91.4
N2	4.2	4.4	95.4	87.5	26.1	26.2	99.6	100.4	27.1	27.2	99.6	102.3	7.3	7.6	96.0	90.1	70	70	100.0	100.0
P2		6.1				26.0				26.1				7.1				61		
S2	5.0	5.0	100.0	104.2	26.1	26.1	100.0	100.4	26.9	26.9	100.0	101.5	9.0	9.1	98.9	111.1	70	70	100.0	100.0
U2	6.5	6.7	97.0	135.4	26.0	26.0	100.0	100.0	26.1	26.1	100.0	98.5	7.0	7.1	98.6	86.4	63	64	98.4	90.0
Y2		5.3				26.6				27.3				8.9				66		
B3		5.1				25.5				26.3				7.9				78		
C3		4.7				25.6				26.4				7.8				70		
FKBG DATA																				
CUR. AV.	4.9				26.1				26.6				8.0				68			
CUM. AV.	4.8				26.0				26.5				8.1				70			
IND. *C	102.1				100.4				100.4				98.8				97.1			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE IV

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 33 LB FOURDRINIER KRAFT LINERBOARD

OCTOBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	4.2	4.7	89.4	87.5	32.0	32.5	98.5	97.6	33.2	33.6	98.8	98.8	9.7	9.6	101.0	98.0	89	88	101.1	103.5
B1		6.1				32.9				33.0				9.7				81		
C1		3.8				33.1				33.2				9.7				83		
E1	4.5	4.1	109.8	93.8	32.2	32.2	100.0	98.2	33.4	33.5	99.7	99.4	10.1	10.1	100.0	102.0	86	90	95.6	100.0
G1		5.5				33.5				33.8				10.0				91		
H1		3.3				32.7				34.0				9.8				86		
I1	5.4	5.0	108.0	112.5	31.9	32.6	97.8	97.2	32.7	33.6	97.3	97.3	10.0	10.0	100.0	101.0	93	93	100.0	108.1
J1		4.6				33.6				33.7				10.3				81		
K1		5.2				32.7				33.6				9.2				88		
L1	4.7	4.6	102.2	97.9	32.1	32.2	99.7	97.9	33.2	33.4	99.4	98.8	8.9	9.2	96.7	89.9	93	93	100.0	108.1
Q1	6.0	5.5	109.1	125.0	32.2	32.3	99.7	98.2	32.8	33.0	99.4	97.6	9.4	9.8	95.9	94.9	91	88	103.4	105.8
T1	4.8	4.3	111.6	100.0	33.0	33.2	99.4	100.6	33.2	33.4	99.4	98.8	9.7	9.6	101.0	98.0	77	82	93.9	89.5
U1	5.0	4.8	104.2	104.2	33.1	33.1	100.0	100.9	33.2	33.2	100.0	98.8	9.8	9.9	99.0	99.0	84	87	96.6	97.7
V1		2.7				32.0				33.8				9.6				92		
W1	4.8	4.8	100.0	100.0	32.6	32.5	100.3	99.4	33.7	33.5	100.6	100.3	10.1	10.1	100.0	102.0	82	80	102.5	95.3
X1		4.7				32.1				33.2				10.8				83		
Y1	4.4	4.2	104.8	91.7	33.7	34.0	99.1	102.7	33.8	34.1	99.1	100.6	10.2	10.3	99.0	103.0	80	82	97.6	93.0
Z1		3.7				31.9				33.3				9.9				93		
A2	5.0	5.0	100.0	104.2	32.3	32.5	99.4	98.5	33.3	33.5	99.4	99.1	11.3	11.0	102.7	114.1	90	94	95.7	104.6
B2	5.7	6.1	93.4	118.8	32.4	32.4	100.0	98.8	33.1	33.0	100.3	98.5	9.3	9.6	96.9	93.9	81	87	93.1	94.2
F2	5.9	6.1	96.7	122.9	33.9	34.0	99.7	103.4	34.6	34.6	100.0	103.0	10.2	10.2	100.0	103.0	78	79	98.7	90.7
G2	3.3	3.8	86.8	68.8	33.2	33.2	100.0	101.2	34.8	34.6	100.6	103.6	9.1	9.5	95.8	91.9	81	78	103.8	94.2
K2	2.6	3.2	81.2	54.2	32.5	33.3	97.6	99.1	32.8	33.6	97.6	97.6	9.6	10.0	96.0	97.0	86	79	108.9	100.0
M2	5.8	6.0	96.7	120.8	33.5	33.6	99.7	102.1	34.2	34.3	99.7	101.8	10.8	11.2	96.4	109.1	78	78	100.0	90.7
N2	4.8	4.9	98.0	100.0	32.7	32.8	99.7	99.7	33.8	33.9	99.7	100.6	10.0	10.0	100.0	101.0	75	79	94.9	87.2
P2	6.1	6.2	98.4	127.1	33.1	33.1	100.0	100.9	33.2	33.2	100.0	98.8	9.3	9.3	100.0	93.9	82	82	100.0	95.3
R2	4.7	5.1	92.2	97.9	33.1	33.2	99.7	100.9	33.2	33.3	99.7	98.8	9.0	9.2	97.8	90.9	83	87	95.4	96.5
S2	5.2	5.0	104.0	108.3	33.1	33.0	100.3	100.9	34.0	33.9	100.3	101.2	10.2	10.2	100.0	103.0	91	87	104.6	105.8
T2	1.8	2.1	85.7	37.5	32.1	32.4	99.1	97.9	34.2	34.4	99.4	101.8	10.2	10.4	98.1	103.0	86	85	101.2	100.0
U2		6.1				32.7				32.8				9.6				83		
X2	5.8	5.7	101.8	120.8	33.3	33.2	100.3	101.5	33.4	33.3	100.3	99.4					89	86	103.5	103.5
B3	4.8	4.7	102.1	100.0	32.1	32.3	99.4	97.9	33.2	33.4	99.4	98.8	10.0	9.8	102.0	101.0	96	92	104.3	111.6
C3	5.4	5.1	105.9	112.5	32.6	32.6	100.0	99.4	33.4	33.6	99.4	99.4	9.7	9.9	98.0	98.0	83	84	98.8	96.5
FKBG DATA																				
CUR. AV.	4.8				32.7				33.5				9.8				85			
CUM. AV.	4.8				32.8				33.6				9.9				86			
IND. *C	100.0				99.7				99.7				99.0				98.8			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE V

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 33 LB FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	4.4	4.7	93.6	91.7	32.3	32.5	99.4	98.5	33.5	33.6	99.7	99.7	9.1	9.6	94.8	91.9	86	88	97.7	101.2
B1	5.8	6.1	95.1	120.8	32.9	32.9	100.0	100.3	33.0	33.0	100.0	98.2	10.0	9.7	103.1	101.0	80	81	98.8	94.1
C1	3.9	3.8	102.6	81.2	33.1	33.1	100.0	100.9	33.2	33.2	100.0	98.8	10.1	9.7	104.1	102.0	86	83	103.6	101.2
E1	4.2	4.2	100.0	87.5	32.1	32.2	99.7	97.9	33.4	33.5	99.7	99.4	10.4	10.1	103.0	105.0	78	90	86.7	91.8
G1	5.6	5.5	101.8	116.7	33.4	33.4	100.0	101.8	33.7	33.8	99.7	100.3	9.9	9.9	100.0	100.0	88	91	96.7	103.5
H1		3.3				32.7				34.0				9.8				86		
I1		5.2				32.2				33.0				9.8				92		
J1		4.7				33.7				33.8				10.4				81		
K1		5.2				32.7				33.6				9.2				88		
L1	4.6	4.6	100.0	95.8	32.1	32.2	99.7	97.9	33.2	33.4	99.4	98.8	9.0	9.2	97.8	90.9	96	93	103.2	112.9
C1	5.5	5.6	98.2	114.6	32.2	32.2	100.0	98.2	33.0	33.0	100.0	98.2	9.7	9.8	99.0	98.0	88	88	100.0	103.5
T1	4.2	4.4	95.4	87.5	33.2	33.2	100.0	101.2	33.4	33.4	100.0	99.4	9.7	9.6	101.0	98.0	84	82	102.4	98.8
U1	5.0	4.9	102.0	104.2	33.1	33.1	100.0	100.9	33.2	33.2	100.0	98.8	9.6	9.8	98.0	97.0	88	87	101.1	103.5
V1		2.6				32.0				33.8				9.6				90		
W1	4.8	4.8	100.0	100.0	32.5	32.5	100.0	99.1	33.6	33.5	100.3	100.0	10.1	10.1	100.0	102.0	81	80	101.2	95.3
X1	5.1	4.7	108.5	106.2	32.4	32.1	100.9	98.8	33.3	33.2	100.3	99.1	10.7	10.8	99.1	108.1	81	83	97.6	95.3
Y1	4.3	4.3	100.0	89.6	33.6	34.0	98.8	102.4	33.7	34.0	99.1	100.3	10.6	10.3	102.9	107.1	81	82	98.8	95.3
Z1		2.7				31.9				33.3				9.9				92		
A2	4.9	5.0	98.0	102.1	32.2	32.5	99.1	98.2	33.2	33.5	99.1	98.8	11.5	11.1	103.6	116.2	87	93	93.5	102.4
B2	6.3	6.1	103.3	131.2	32.6	32.4	100.6	99.4	33.1	33.0	100.3	98.5	9.5	9.6	99.0	96.0	83	86	96.5	97.6
F2	6.3	6.2	101.6	131.2	33.6	34.0	98.8	102.4	34.1	34.7	98.3	101.5	10.4	10.2	102.0	105.0	78	79	98.7	91.8
G2	3.8	3.8	100.0	79.2	33.1	33.2	99.7	100.9	34.5	34.7	99.4	102.7	8.9	9.4	94.7	89.9	82	78	105.1	96.5
K2	3.0	3.1	96.8	62.5	33.2	33.2	100.0	101.2	33.5	33.5	100.0	99.7	10.4	9.9	105.0	105.0	84	80	105.0	98.8
M2	5.5	6.0	91.7	114.6	33.5	33.6	99.7	102.1	34.3	34.3	100.0	102.1	10.8	11.0	98.2	109.1	79	78	101.3	92.9
N2	4.7	4.9	95.9	97.9	32.6	32.9	99.1	99.4	33.7	33.9	99.4	100.3	10.6	10.0	106.0	107.1	78	78	100.0	91.8
P2	6.3	6.2	101.6	131.2	33.3	33.1	100.6	101.5	33.4	33.2	100.6	99.4	9.2	9.3	98.9	92.9	84	82	102.4	98.8
R2	4.3	4.9	87.8	89.6	33.1	33.1	100.0	100.9	33.2	33.2	100.0	98.8		9.0			79	85	92.9	92.9
S2	5.7	5.0	114.0	118.8	33.1	33.0	100.3	100.9	33.9	34.0	99.7	100.9	10.2	10.3	99.0	103.0	85	89	95.5	100.0
T2	1.8	2.0	90.0	37.5	32.1	32.4	99.1	97.9	34.2	34.4	99.4	101.8	10.5	10.4	101.0	106.1	86	86	100.0	101.2
U2		6.1				32.7				32.8				9.6				83		
X2	5.8	5.7	101.8	120.8	33.2	33.2	100.0	101.2	33.3	33.3	100.0	99.1					84	86	97.7	98.8
B3	5.0	4.7	106.4	104.2	32.4	32.3	100.3	98.8	33.4	33.4	100.0	99.4	9.7	9.8	99.0	98.0	94	93	101.1	110.6
C3	5.2	5.1	102.0	108.3	32.5	32.6	99.7	99.1	33.4	33.6	99.4	99.4	9.8	9.9	99.0	99.0	84	84	100.0	98.8
FKBG DATA																				
CUR. AV.	4.8				32.8				33.5				10.0				84			
CUM. AV.	4.8				32.8				33.6				9.9				85			
INC. *C	100.0				100.0				99.7				101.0				98.8			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE VI

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 33 LB FOURDRINIER KRAFT LINERBOARD

DECEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	4.3	4.7	91.5	89.6	32.3	32.5	99.4	98.5	33.5	33.6	99.7	99.7	9.2	9.5	96.8	92.9	83	87	95.4	97.6
B1	5.7	6.1	93.4	118.8	33.2	32.9	100.9	101.2	33.3	33.0	100.9	99.1	9.7	9.7	100.0	98.0	81	81	100.0	95.3
C1	4.6	3.8	121.0	95.8	33.0	33.1	99.7	100.6	33.1	33.2	99.7	98.5	10.3	9.8	105.1	104.0	90	83	108.4	105.9
E1	4.4	4.2	104.8	91.7	32.0	32.2	99.4	97.6	33.2	33.5	99.1	98.8	9.7	10.1	96.0	98.0	89	89	100.0	104.7
G1	5.5	5.5	100.0	114.6	33.6	33.4	100.6	102.4	33.9	33.7	100.6	100.9	10.2	9.8	104.1	103.0	93	90	103.3	109.4
H1	2.2	3.3	66.7	45.8	32.3	32.7	98.8	98.5	34.3	34.0	100.9	102.1	9.7	9.8	99.0	98.0	91	86	105.8	107.0
I1		5.2				32.2				33.0				9.8				92		
J1		4.6				33.8				33.9				10.5				81		
K1		5.1				32.6				33.5				9.2				88		
L1	4.6	4.6	100.0	95.8	32.2	32.2	100.0	98.2	33.3	33.4	99.7	99.1	8.7	9.2	94.6	87.9	88	93	94.6	103.5
C1	5.9	5.5	107.3	122.9	32.2	32.2	100.0	98.2	32.9	33.0	99.7	97.9	9.7	9.8	99.0	98.0	86	88	97.7	101.2
R1	5.9			122.9	33.0			100.6	33.1			98.5	10.1			102.0	83			97.6
T1	4.4	4.4	100.0	91.7	33.1	33.2	99.7	100.9	33.3	33.4	99.7	99.1	9.9	9.6	103.1	100.0	81	82	98.8	95.3
U1	4.9	4.9	100.0	102.1	33.1	33.1	100.0	100.9	33.2	33.2	100.0	98.8	9.8	9.8	100.0	99.0	91	88	103.4	107.0
V1		2.6				32.0				33.8				9.6				91		
W1	4.8	4.8	100.0	100.0	32.6	32.5	100.3	99.4	33.7	33.5	100.6	100.3	10.0	10.2	98.0	101.0	82	80	102.5	96.5
X1	5.9	4.8	122.9	122.9	32.6	32.2	101.2	99.4	33.3	33.2	100.3	99.1	9.8	10.8	90.7	99.0	82	82	100.0	96.5
Y1	4.4	4.3	102.3	91.7	33.2	33.9	97.9	101.2	33.3	34.0	97.9	99.1	10.5	10.4	101.0	106.1	79	82	96.3	92.9
Z1		3.7				31.9				33.3				9.9				92		
A2		5.0				32.5				33.4				11.1				92		
B2	6.0	6.2	96.8	125.0	32.4	32.5	99.7	98.8	33.0	33.0	100.0	98.2	9.5	9.6	99.0	96.0	84	85	98.8	98.8
F2	6.3	6.2	101.6	131.2	33.4	34.0	98.2	101.8	33.9	34.6	98.0	100.9	10.1	10.3	98.0	102.0	78	78	100.0	91.8
G2	4.1	3.8	107.9	85.4	33.7	33.2	101.5	102.7	35.0	34.6	101.2	104.2	9.6	9.4	102.1	97.0	78	79	98.7	91.8
K2	3.1	3.1	100.0	64.6	34.9	33.2	105.1	106.4	35.2	33.5	105.1	104.8	10.6	10.0	106.0	107.1	82	81	101.2	96.5
M2	5.6	5.8	96.6	116.7	33.2	33.6	98.8	101.2	34.0	34.3	99.1	101.2	10.9	11.0	99.1	110.1	78	78	100.0	91.8
N2	4.9	4.9	100.0	102.1	32.6	32.8	99.4	99.4	33.6	33.9	99.1	100.0	10.0	10.0	100.0	101.0	79	78	101.3	92.9
P2	6.3	6.2	101.6	131.2	33.1	33.2	99.7	100.9	33.2	33.2	100.0	98.8	9.6	9.3	103.2	97.0	83	83	100.0	97.6
R2		4.8				33.1				33.2				9.0				83		
S2	5.3	5.2	101.9	110.4	33.1	33.0	100.3	100.9	34.0	33.9	100.3	101.2	10.4	10.3	101.0	105.0	80	88	90.9	94.1
T2	2.1	2.0	105.0	43.8	32.1	32.3	99.4	97.9	34.1	34.3	99.4	101.5	10.6	10.3	102.9	107.1	85	86	98.8	100.0
U2		6.1				32.7				32.8				9.6				83		
X2	5.8	5.7	101.8	120.8	33.1	33.2	99.7	100.9	33.2	33.3	99.7	98.8					83	86	96.5	97.6
B3	4.8	4.6	104.3	100.0	32.2	32.3	99.7	98.2	33.3	33.4	99.7	99.1	9.7	9.8	99.0	98.0	99	93	106.4	116.5
C3	5.4	5.1	105.9	112.5	32.5	32.6	99.7	99.1	33.3	33.5	99.4	99.1	10.1	9.8	103.1	102.0	81	84	96.4	95.3
FKBG DATA																				
CUR. AV.	4.9				32.9				33.6				9.9				84			
CUM. AV.	4.8				32.8				33.6				9.9				85			
IND. *C	102.1				100.3				100.0				100.0				98.8			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE VII

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 38 LE FOURDRINIER KRAFT LINERBOARD

OCTOBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	5.0	5.3	94.3	94.3	37.2	37.6	98.9	98.4	38.3	38.6	99.2	99.5	11.3	11.1	101.8	102.7	96	97	99.0	99.0
B1	6.5	6.6	98.5	122.6	37.9	37.9	100.0	100.3	38.0	38.0	100.0	98.7	11.0	10.6	103.8	100.0	89	92	96.7	91.8
C1	5.0	5.0	100.0	94.3	38.1	38.0	100.3	100.8	38.2	38.1	100.3	99.2	11.5	11.2	102.7	104.5	102	104	98.1	105.2
E1	5.9	5.2	113.5	111.3	37.6	37.4	100.5	99.5	38.4	38.5	99.7	99.7	11.3	11.0	102.7	102.7	95	102	93.1	97.9
F1	5.8	5.1	113.7	109.4	37.5	37.5	100.0	99.2	38.3	38.6	99.2	99.5	10.5	10.7	98.1	95.4	101	100	101.0	104.1
G1	5.7	5.6	101.8	107.5	38.4	38.4	100.0	101.6	38.7	38.7	100.0	100.5	10.5	10.8	97.2	95.4	100	98	102.0	103.1
I1		5.3				37.9				38.9				11.4				111		
J1	4.5	4.9	91.8	84.9	39.3	38.8	101.3	104.0	39.4	38.9	101.3	102.3	11.5	11.1	103.6	104.5	95	96	99.0	97.9
L1	5.0	5.0	100.0	94.3	37.1	37.1	100.0	98.1	38.2	38.2	100.0	99.2	10.3	10.5	98.1	93.6	101	102	99.0	104.1
N1	6.0	6.2	96.8	113.2	37.5	38.3	97.9	99.2	38.2	38.9	98.2	99.2	11.8	11.9	99.2	107.3	92	93	98.9	94.8
Q1	5.5	6.1	90.2	103.8	37.1	37.4	99.2	98.1	38.0	38.0	100.0	98.7	11.3	11.2	100.9	102.7	102	98	104.1	105.2
T1	5.2	4.8	108.3	98.1	38.2	38.2	100.0	101.0	38.4	38.4	100.0	99.7	11.3	10.8	104.6	102.7	93	94	98.9	95.9
U1	5.5	5.2	105.8	103.8	38.1	38.2	99.7	100.8	38.2	38.3	99.7	99.2	10.6	11.2	94.6	96.4	98	98	100.0	101.0
V1		3.0				36.3				38.2				10.3				106		
W1	4.9	4.8	102.1	92.4	37.3	37.3	100.0	98.7	38.5	38.5	100.0	100.0	12.0	11.5	104.3	109.1	92	93	98.9	94.8
Y1		4.6				38.9				39.0				11.4				97		
A2	5.8	5.9	98.3	109.4	38.1	37.7	101.1	100.8	38.9	38.5	101.0	101.0	11.3	11.4	99.1	102.7	107	106	100.9	110.3
G2	5.5	4.7	117.0	103.8	37.8	37.7	100.3	100.0	38.7	39.0	99.2	100.5	10.0	10.2	98.0	90.9	86	88	97.7	88.6
I2	4.6	4.8	95.8	86.8	38.7	38.2	101.3	102.4	38.8	38.4	101.0	100.8	10.1	10.3	98.0	91.8	98	101	97.0	101.0
N2	4.6	4.8	95.8	86.8	37.8	37.7	100.3	100.0	39.1	38.9	100.5	101.6	10.9	11.4	95.6	99.1	88	89	98.9	90.7
O2		5.7				37.6				38.4				11.0				108		
R2	5.0	5.4	92.6	94.3	38.1	38.3	99.5	100.8	38.2	38.4	99.5	99.2	10.2	10.4	98.1	92.7	94	96	97.9	96.9
S2	5.1	5.0	102.0	96.2	38.0	38.0	100.0	100.5	39.1	39.1	100.0	101.6	11.5	11.7	98.3	104.5	107	96	111.4	110.3
W2	4.6	3.5	131.4	86.8	37.4	37.5	99.7	98.9	38.7	39.2	98.7	100.5	10.1	10.1	100.0	91.8	93	98	94.9	95.9
X2	5.8	5.7	101.8	109.4	38.2	38.1	100.3	101.0	38.3	38.2	100.3	99.5					96	93	103.2	99.0
B3	5.1	4.8	106.2	96.2	37.6	37.2	101.1	99.5	38.7	38.4	100.8	100.5	11.1	11.2	99.1	100.9	102	99	103.0	105.2
C3		5.0				37.6				38.7				10.8				99		
FKBG DATA																				
CUR. AV.	5.3				37.9				38.5				11.0				97			
CUM. AV.	5.3				37.8				38.5				11.0				97			
IND. *C	100.0				100.3				100.0				100.0				100.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE VIII

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 38 LB FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	5.1	5.3	96.2	96.2	37.3	37.6	99.2	98.7	38.4	38.6	99.5	99.7	10.7	11.1	96.4	97.3	98	97	101.0	101.0
B1	6.4	6.5	98.5	120.8	38.0	37.9	100.3	100.5	38.1	38.0	100.3	99.0	11.2	10.7	104.7	101.8	89	92	96.7	91.8
C1	4.5	5.0	90.0	84.9	38.1	38.0	100.3	100.8	38.2	38.1	100.3	99.2	11.3	11.2	100.9	102.7	96	104	92.3	99.0
E1	5.8	5.2	111.5	109.4	37.5	37.4	100.3	99.2	38.3	38.4	99.7	99.5	11.5	11.0	104.5	104.5	92	101	91.1	94.8
F1	5.7	5.2	109.6	107.5	37.9	37.4	101.3	100.3	38.8	38.5	100.8	100.8	10.6	10.7	99.1	96.4	97	100	97.0	100.0
G1	5.7	5.6	101.8	107.5	38.3	38.4	99.7	101.3	38.6	38.7	99.7	100.2	10.6	10.8	98.1	96.4	97	98	99.0	100.0
I1		5.3				37.9				38.9				11.4				111		
J1	5.1	4.8	106.2	96.2	39.0	38.9	100.2	103.2	39.1	39.0	100.2	101.6	11.1	11.1	100.0	100.9	95	96	99.0	97.9
L1	4.9	5.0	98.0	92.4	37.0	37.1	99.7	97.9	38.1	38.2	99.7	99.0	10.2	10.5	97.1	92.7	100	102	98.0	103.1
N1	5.7	6.2	91.9	107.5	37.4	38.2	97.9	98.9	38.3	38.9	98.4	99.5	11.1	11.9	93.3	100.9	92	93	98.9	94.8
Q1		6.1				37.3				38.0				11.2				98		
T1	4.4	4.8	91.7	83.0	38.2	38.2	100.0	101.0	38.4	38.4	100.0	99.7	11.2	10.9	102.8	101.8	94	94	100.0	96.9
U1	5.3	5.3	100.0	100.0	38.1	38.2	99.7	100.8	38.2	38.3	99.7	99.2	11.1	11.1	100.0	100.9	101	98	103.1	104.1
V1		3.1				36.6				38.5				10.2				103		
W1	5.0	4.8	104.2	94.3	37.2	37.3	99.7	98.4	38.3	38.5	99.5	99.5	11.2	11.5	97.4	101.8	91	93	97.8	93.8
Y1		4.6				38.9				39.0				11.4				97		
A2	5.8	5.9	98.3	109.4	37.4	37.7	99.2	98.9	38.2	38.5	99.2	99.2	11.3	11.4	99.1	102.7	102	105	97.1	105.2
G2	5.3	4.8	110.4	100.0	37.6	37.7	99.7	99.5	38.6	38.9	99.2	100.2	10.6	10.2	103.9	96.4	90	88	102.3	92.8
I2	4.8	4.8	100.0	90.6	38.1	38.2	99.7	100.8	38.2	38.3	99.7	99.2	9.9	10.2	97.0	90.0	102	101	101.0	105.2
N2	4.8	4.8	100.0	90.6	37.4	37.7	99.2	98.9	38.6	39.0	99.0	100.2	11.4	11.3	100.9	103.6	88	89	98.9	90.7
O2		5.8				37.6				38.4				11.2				110		
R2	5.1	5.4	94.4	96.2	38.3	38.3	100.0	101.3	38.4	38.4	100.0	99.7	10.3	10.4	99.0	93.6	92	95	96.8	94.8
S2		5.0				38.0				39.1				11.7				97		
W2		4.1				37.4				38.9				10.1				96		
X2	5.9	5.7	103.5	111.3	38.2	38.1	100.3	101.0	38.3	38.2	100.3	99.5					94	93	101.1	96.9
B3	5.1	4.8	106.2	96.2	37.0	37.2	99.5	97.9	38.1	38.4	99.2	99.0	11.5	11.2	102.7	104.5	98	99	99.0	101.0
C3	5.8	5.0	116.0	109.4	37.7	37.6	100.3	99.7	38.5	38.7	99.5	100.0	11.3	10.8	104.6	102.7	95	99	96.0	97.9
FKBG DATA																				
CUR. AV.	5.3				37.8				38.4				11.0				95			
CUM. AV.	5.3				37.8				38.5				11.0				97			
INC. *C	100.0				100.0				99.7				100.0				97.9			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE IX

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 38 LB FOURDRINIER KRAFT LINERBOARD

DECEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	5.1	5.3	96.2	96.2	37.4	37.6	99.5	98.9	38.5	38.6	99.7	100.0	11.0	11.1	99.1	100.0	95	97	97.9	97.9
B1		6.5				37.9				38.0				10.8				92		
C1	5.0	5.0	100.0	94.3	38.0	38.0	100.0	100.5	38.1	38.1	100.0	99.0	11.4	11.2	101.8	103.6	99	103	96.1	102.1
E1	6.6	5.3	124.5	124.5	37.9	37.4	101.3	100.3	38.4	38.4	100.0	99.7	10.4	11.0	94.5	94.5	98	100	98.0	101.0
F1	5.7	5.3	107.5	107.5	37.4	37.5	99.7	98.9	38.3	38.5	99.5	99.5	10.6	10.7	99.1	96.4	105	99	106.1	108.2
G1	5.4	5.6	96.4	101.9	38.3	38.4	99.7	101.3	38.6	38.7	99.7	100.2	11.4	10.7	106.5	103.6	96	97	99.0	99.0
I1		5.3				37.9				38.9				11.4				111		
J1	4.6	4.7	97.9	86.8	39.7	38.9	102.0	105.0	39.8	39.0	102.0	103.4	11.2	11.1	100.9	101.8	96	96	100.0	99.0
L1	5.0	5.0	100.0	94.3	37.1	37.1	100.0	98.1	38.2	38.2	100.0	99.2	10.1	10.4	97.1	91.8	100	103	97.1	103.1
N1	6.1	6.1	100.0	115.1	37.4	38.1	98.2	98.9	38.1	38.8	98.2	99.0	11.4	11.8	96.6	103.6	92	93	98.9	94.8
Q1	6.4	6.1	104.9	120.8	37.6	37.3	100.8	99.5	38.2	38.0	100.5	99.2	10.8	11.2	96.4	98.2	99	98	101.0	102.1
S1	6.6			124.5	38.0			100.5	38.1			99.0	10.4			94.5	95			97.9
T1	4.7	4.8	97.9	88.7	38.2	38.2	100.0	101.0	38.4	38.4	100.0	99.7	11.4	10.9	104.6	103.6	91	94	96.8	93.8
U1	5.2	5.3	98.1	98.1	38.2	38.2	100.0	101.0	38.3	38.3	100.0	99.5	11.2	11.1	100.9	101.8	98	98	100.0	101.0
V1		3.1				36.6				38.5				10.2				103		
W1	5.0	4.8	104.2	94.3	37.3	37.3	100.0	98.7	38.4	38.5	99.7	99.7	11.6	11.5	100.9	105.4	92	92	100.0	94.8
Y1		4.6				38.9				39.0				11.4				97		
A2	6.1	5.9	103.4	115.1	37.6	37.7	99.7	99.5	38.3	38.4	99.7	99.5	11.1	11.4	97.4	100.9	100	104	96.2	103.1
G2		4.9				37.7				38.8				10.2				88		
I2	4.3	4.8	89.6	81.1	38.1	38.2	99.7	100.8	38.2	38.3	99.7	99.2	9.5	10.1	94.0	86.4	105	101	104.0	108.2
N2	4.7	4.8	97.9	88.7	37.5	37.7	99.5	99.2	38.8	38.9	99.7	100.8	11.6	11.3	102.6	105.4	87	88	98.9	89.7
Q2		6.0				37.5				38.2				11.6				110		
R2	5.3	5.4	98.1	100.0	38.1	38.3	99.5	100.8	38.2	38.4	99.5	99.2	10.0	10.3	97.1	90.9	92	94	97.9	94.8
S2	5.4	5.0	108.0	101.9	38.1	38.0	100.3	100.8	39.1	39.1	100.0	101.6	11.0	11.8	93.2	100.0	93	98	94.9	95.9
W2	4.5	4.4	102.3	84.9	37.5	37.6	99.7	99.2	38.8	39.0	99.5	100.8	9.1	10.0	91.0	82.7	101	94	107.4	104.1
X2	5.9	5.8	101.7	111.3	38.4	38.1	100.8	101.6	38.5	38.2	100.8	100.0					98	93	105.4	101.0
B3	4.5	4.8	93.8	84.9	37.1	37.2	99.7	98.1	38.4	38.4	100.0	99.7	11.3	11.2	100.9	102.7	99	99	100.0	102.1
C3		5.4				37.6				38.6				11.0				97		
FKBG DATA																				
CUR. AV.	5.3				37.8				38.5				10.8				97			
CUM. AV.	5.3				37.8				38.5				11.0				97			
IND. *C	100.0				100.0				100.0				98.2				100.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE X

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 42 LB FOURDRINIER KRAFT LINERBOARD

OCTOBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	5.1	5.3	96.2	92.7	41.3	41.5	99.5	99.5	42.5	42.6	99.8	100.2	12.7	12.2	104.1	105.8	105	106	99.0	100.0
B1	6.7	6.6	101.5	121.8	41.9	41.9	100.0	101.0	42.0	42.0	100.0	99.0	11.9	11.8	100.8	99.2	100	102	98.0	95.2
C1		5.4				42.2				42.3				12.4				109		
D1	6.3	6.2	101.6	114.5	42.0	42.3	99.3	101.2	42.7	43.0	99.3	100.7	12.7	12.6	100.8	105.8	99	99	100.0	94.3
E1	5.8	5.5	105.4	105.4	41.4	41.5	99.8	99.8	42.3	42.5	99.5	99.8	12.2	12.0	101.7	101.7	101	108	93.5	96.2
F1	6.0	5.4	111.1	109.1	41.5	41.2	100.7	100.0	42.3	42.3	100.0	99.8	11.4	11.6	98.3	95.0	108	104	103.8	102.8
G1	5.9	5.7	103.5	107.3	42.4	42.4	100.0	102.2	42.8	42.8	100.0	100.9	11.9	11.9	100.0	99.2	108	109	99.1	102.8
H1	5.9	5.8	101.7	107.3	41.7	41.6	100.2	100.5	42.6	42.5	100.2	100.5	12.2	12.0	101.7	101.7	101	104	97.1	96.2
I1	5.6	5.4	103.7	101.8	41.1	41.3	99.5	99.0	42.1	42.3	99.5	99.3	12.8	12.5	102.4	106.7	110	112	98.2	104.8
J1	5.3	5.2	101.9	96.4	42.4	42.3	100.2	102.2	42.5	42.4	100.2	100.2	12.1	12.1	100.0	100.8	104	105	99.0	99.0
K1	6.4	5.9	108.5	116.4	41.8	41.5	100.7	100.7	42.4	42.4	100.0	100.0	11.3	11.7	96.6	94.2	101	103	98.0	96.2
L1	5.3	5.1	103.9	96.4	41.2	41.1	100.2	99.3	42.3	42.3	100.0	99.8	11.4	11.6	98.3	95.0	107	108	99.1	101.9
M1	4.4	4.2	104.8	80.0	42.3	42.2	100.2	101.9	42.5	42.4	100.2	100.2	12.0	12.0	100.0	100.0	106	106	100.0	101.0
N1	6.3	6.3	100.0	114.5	41.6	41.9	99.3	100.2	42.3	42.6	99.3	99.8	12.5	12.7	98.4	104.2	100	102	98.0	95.2
O1	6.2	6.2	100.0	112.7	41.2	41.2	100.0	99.3	41.9	41.8	100.2	98.8	12.3	12.2	100.8	102.5	107	110	97.3	101.9
P1	5.8	6.0	96.7	105.4	42.0	41.6	101.0	101.2	42.0	41.6	101.0	99.0	12.3	12.3	100.0	102.5	104	101	103.0	99.0
Q1	6.4	6.1	104.9	116.4	41.2	41.2	100.0	99.3	41.8	42.0	99.5	98.6	12.7	12.2	104.1	105.8	105	106	99.0	100.0
S1	6.8	7.0	97.1	123.6	42.0	42.0	100.0	101.2	42.1	42.1	100.0	99.3	11.7	11.5	101.7	97.5	101	103	98.0	96.2
T1	5.1	4.8	106.2	92.7	41.9	42.2	99.3	101.0	42.1	42.4	99.3	99.3	11.9	11.8	100.8	99.2	104	105	99.0	99.0
U1	5.4	5.3	101.9	98.2	42.1	42.1	100.0	101.4	42.2	42.2	100.0	99.5	12.1	12.4	97.6	100.8	105	105	100.0	100.0
V1		3.7				40.9				42.8				11.7				112		
W1	5.0	4.9	102.0	90.9	41.1	41.2	99.8	99.0	42.3	42.4	99.8	99.8	12.9	12.5	103.2	107.5	101	101	100.0	96.2
Y1		4.8				42.4				42.5				12.3				106		
Z1	5.0	4.8	104.2	90.9	40.9	40.9	100.0	98.6	42.1	42.2	99.8	99.3		12.2			113	105	103.7	107.6
A2	6.7	6.6	101.5	121.8	41.5	41.9	99.0	100.0	42.0	42.4	99.0	99.0	12.6	12.7	99.2	105.0	110	112	98.2	104.8
B2	7.1	6.5	109.2	129.1	41.6	41.5	100.2	100.2	41.9	42.0	99.8	98.8	11.7	12.2	95.9	97.5	99	103	96.1	94.3
C2		5.2				42.3				42.4				11.4				104		
D2		5.2				41.6				42.8				11.2				106		
E2		3.3				41.1				43.1				12.4				108		
G2	5.8	5.5	105.4	105.4	41.4	41.4	100.0	99.8	42.3	42.4	99.8	99.8	11.2	11.2	100.0	93.3	97	98	99.0	92.4
H2		5.9				42.2				43.2				12.1				110		
I2	4.8	4.9	98.0	87.3	42.0	42.0	100.0	101.2	42.1	42.2	99.8	99.3	11.3	11.4	99.1	94.2	107	107	100.0	101.9
J2	5.0	5.0	100.0	90.9	41.5	41.6	99.8	100.0	42.7	42.8	99.8	100.7	11.3	11.5	98.3	94.2	108	106	101.9	102.8
K2	3.0	3.7	81.1	54.5	42.1	42.4	99.3	101.4	42.5	42.8	99.3	100.2	12.8	12.7	100.8	106.7	101	99	102.0	96.2
M2	6.1	6.0	101.7	110.9	42.4	42.2	100.5	102.2	43.2	43.0	100.5	101.9	13.7	13.8	99.3	114.2	98	98	100.0	93.3
N2	5.0	5.0	100.0	90.9	41.4	41.7	99.3	99.8	42.6	43.0	99.1	100.5	12.0	12.4	96.8	100.0	96	97	99.0	91.4
O2	6.0	5.8	103.4	109.1	41.6	41.6	100.0	100.2	42.4	42.4	100.0	100.0	11.5	12.0	95.8	95.8	109	113	96.5	103.8
P2	6.3	6.4	98.4	114.5	42.3	41.9	101.0	101.9	42.4	42.0	101.0	100.0	11.5	11.6	99.1	95.8	100	102	98.0	95.2
Q2	5.9	5.1	115.7	107.3	42.6	42.6	100.0	102.6	43.0	43.0	100.0	101.4	12.3	12.4	99.2	102.5	112	110	101.8	106.7
R2	5.8	5.9	98.3	105.4	42.1	42.1	100.0	101.4	42.2	42.2	100.0	99.5	11.3	11.8	95.8	94.2	101	103	98.0	96.2
T2	5.6	5.6	100.0	101.8	41.5	41.5	100.0	100.0	42.5	42.5	100.0	100.2	13.0	12.9	100.8	108.3	102	102	100.0	97.1
V2		4.9				41.5				42.8				11.8				116		
W2	5.8	5.0	116.0	105.4	41.4	41.2	100.5	99.8	42.3	42.4	99.8	99.8	10.9	10.9	100.0	90.8	112	104	107.7	106.7
X2	5.8	5.8	100.0	105.4	42.0	42.0	100.0	101.2	42.1	42.1	100.0	99.3					105	102	102.9	100.0
Z2	5.6	5.5	101.8	101.8	42.0	42.0	100.0	101.2	42.1	42.1	100.0	99.3	13.4	12.5	107.2	111.7	112	106	105.7	106.7
A3	5.0	5.2	96.2	90.9	41.3	41.8	98.8	99.5	42.5	43.0	98.8	100.2	11.8	12.2	96.7	98.3	96	96	100.0	91.4
B3	5.2	5.1	102.0	94.5	40.9	41.2	99.3	98.6	42.0	42.4	99.0	99.0	12.3	12.4	99.2	102.5	106	106	100.0	101.0
C3	6.1	5.8	105.2	110.9	41.6	41.5	100.2	100.2	42.3	42.4	99.8	99.8	11.9	12.2	97.5	99.2	101	102	99.0	96.2
D3	5.4	5.8	93.1	98.2	41.3	41.6	99.3	99.5	42.4	42.5	99.8	100.0	11.8	12.1	97.5	98.3	113	103	109.7	107.6
FKBG DATA																				
CUR. AV.	5.7				41.7				42.3				12.1				104			
CUM. AV.	5.5				41.5				42.4				12.0				105			
IND. *C	103.6				100.5				99.8				100.8				99.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XI

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 42 LB FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT., *A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	5.4	5.2	103.8	98.2	41.2	41.5	99.3	99.3	42.3	42.6	99.3	99.8	12.3	12.2	100.8	102.5	108	106	101.9	103.8
B1	6.5	6.6	98.5	118.2	42.0	41.9	100.2	101.2	42.1	42.0	100.2	99.3	11.8	11.8	100.0	98.3	101	102	99.0	97.1
C1		5.4				42.2				42.3				12.4				109		
D1	6.3	6.3	100.0	114.5	42.0	42.3	99.3	101.2	42.7	43.0	99.3	100.7	12.8	12.6	101.6	106.7	98	99	99.0	94.2
E1	5.8	5.6	103.6	105.4	41.3	41.5	99.5	99.5	42.2	42.5	99.3	99.5	12.3	12.0	102.5	102.5	104	107	97.2	100.0
F1	6.7	5.4	124.1	121.8	41.7	41.2	101.2	100.5	42.2	42.3	99.8	99.5	11.6	11.6	100.0	96.7	108	105	102.8	103.8
G1	5.7	5.7	100.0	103.6	42.3	42.4	99.8	101.9	42.7	42.8	99.8	100.7	11.6	11.9	97.5	96.7	107	109	98.2	102.9
H1	5.6	5.8	96.6	101.8	41.5	41.6	99.8	100.0	42.5	42.5	100.0	100.2	12.6	12.0	105.0	105.0	102	104	98.1	98.1
I1	5.1	5.4	94.4	92.7	40.8	41.2	99.0	98.3	42.0	42.3	99.3	99.0	12.0	12.5	96.0	100.0	107	112	95.5	102.9
J1	5.6	5.2	107.7	101.8	42.1	42.3	99.5	101.4	42.2	42.4	99.5	99.5	12.0	12.0	100.0	100.0	104	105	99.0	100.0
K1	6.3	5.9	106.8	114.5	41.6	41.5	100.2	100.2	42.3	42.4	99.8	99.8	11.5	11.6	99.1	95.8	104	102	102.0	100.0
L1	5.0	5.1	98.0	90.9	41.0	41.1	99.8	98.8	42.2	42.3	99.8	99.5	11.5	11.6	99.1	95.8	107	108	99.1	102.9
M1	3.7	4.2	88.1	67.3	42.5	42.2	100.7	102.4	42.7	42.4	100.7	100.7	12.2	12.0	101.7	101.7	106	106	100.0	101.9
N1	6.3	6.4	98.4	114.5	41.6	41.9	99.3	100.2	42.3	42.6	99.3	99.8	12.5	12.6	99.2	104.2	100	102	98.0	96.2
O1	6.3	6.2	101.6	114.5	41.4	41.2	100.5	99.8	42.1	41.8	100.7	99.3	12.2	12.2	100.0	101.7	107	110	97.3	102.9
P1	5.8	6.0	96.7	105.4	42.0	41.7	100.7	101.2	42.0	41.7	100.7	99.0	12.3	12.3	100.0	102.5	105	102	102.9	101.0
Q1	6.5	6.3	103.2	118.2	41.1	41.2	99.8	99.0	41.7	41.9	99.5	98.3	12.8	12.3	104.1	106.7	103	106	97.2	99.0
S1	6.7	7.0	95.7	121.8	42.0	42.0	100.0	101.2	42.1	42.1	100.0	99.3	11.6	11.5	100.9	96.7	102	103	99.0	98.1
T1	4.7	4.8	97.9	85.4	42.0	42.2	99.5	101.2	42.2	42.4	99.5	99.5	11.8	11.9	99.2	98.3	105	105	100.0	101.0
U1	5.2	5.3	98.1	94.5	42.1	42.1	100.0	101.4	42.2	42.2	100.0	99.5	12.2	12.4	98.4	101.7	105	105	100.0	101.0
V1		3.7				40.9				42.8				11.7				112		
W1	5.1	4.9	104.1	92.7	41.2	41.1	100.2	99.3	42.4	42.4	100.0	100.0	12.4	12.5	99.2	103.3	99	101	98.0	95.2
Y1		4.8				42.4				42.5				12.3				106		
Z1	4.9	4.8	102.1	89.1	40.9	40.9	100.0	98.6	42.2	42.2	100.0	99.5	12.7	12.2	104.1	105.8	104	109	95.4	100.0
A2	6.6	6.6	100.0	120.0	41.7	41.8	99.8	100.5	42.2	42.4	99.5	99.5	12.7	12.7	100.0	105.8	107	112	95.5	102.9
B2	6.1	6.5	93.8	110.9	41.6	41.5	100.2	100.2	42.3	42.0	100.7	99.8	11.6	12.1	95.9	96.7	100	102	98.0	96.2
C2		5.2				42.3				42.4				11.4				104		
D2		5.2				41.6				42.8				11.2				106		
E2		3.2				41.1				43.1				12.4				108		
G2	6.2	5.5	112.7	112.7	41.5	41.4	100.2	100.0	42.2	42.4	99.5	99.5	11.6	11.2	103.6	96.7	96	98	98.0	92.3
H2		5.9				42.2				43.2				12.1				110		
I2	4.8	4.9	98.0	87.3	42.0	42.0	100.0	101.2	42.1	42.1	100.0	99.3	10.9	11.3	96.5	90.8	110	107	102.8	105.8
J2	4.9	5.0	98.0	89.1	41.6	41.6	100.0	100.2	42.9	42.8	100.2	101.2	11.4	11.5	99.1	95.0	107	106	100.9	102.9
K2	3.5	3.6	97.2	63.6	41.8	42.3	98.8	100.7	42.2	42.7	98.8	99.5	12.8	12.8	100.0	106.7	99	99	100.0	95.2
M2	5.6	6.1	91.8	101.8	41.8	42.2	99.0	100.7	42.8	43.0	99.5	100.9	12.9	13.8	93.5	107.5	98	98	100.0	94.2
N2	5.0	5.0	100.0	90.9	41.4	41.7	99.3	99.8	42.6	43.0	99.1	100.5	12.5	12.4	100.8	104.2	96	96	100.0	92.3
O2	6.0	5.9	101.7	109.1	41.6	41.6	100.0	100.2	42.4	42.4	100.0	100.0	12.4	12.0	103.3	103.3	108	113	95.6	103.8
P2	6.3	6.4	98.4	114.5	42.3	42.0	100.7	101.9	42.4	42.1	100.7	100.0	11.8	11.6	101.7	98.3	101	101	100.0	97.1
Q2		5.3				42.6				43.0				12.4				111		
R2	6.0	5.9	101.7	109.1	42.1	42.1	100.0	101.4	42.2	42.2	100.0	99.5	11.3	11.8	95.8	94.2	102	102	100.0	98.1
T2	5.4	5.6	96.4	98.2	41.4	41.5	99.8	99.8	42.5	42.5	100.0	100.2	13.1	12.8	102.3	109.2	103	102	101.0	99.0
V2		4.9				41.5				42.8				11.8				116		
W2	5.5	5.2	105.8	100.0	40.9	41.2	99.3	98.6	41.9	42.4	98.8	98.8	10.7	10.9	98.2	89.2	107	105	101.9	102.9
X2	5.9	5.8	101.7	107.3	42.0	42.0	100.0	101.2	42.1	42.1	100.0	99.3					103	102	101.0	99.0
Z2		5.5				42.0				42.1				12.6				106		
A3	5.0	5.2	96.2	90.9	41.4	41.7	99.3	99.8	42.6	42.9	99.3	100.5	12.3	12.2	100.8	102.5	96	96	100.0	92.3
B3	5.4	5.0	108.0	98.2	41.0	41.1	99.8	98.8	42.1	42.4	99.3	99.3	12.3	12.4	99.2	102.5	106	106	100.0	101.9
C3	6.2	5.8	106.9	112.7	41.6	41.5	100.2	100.2	42.3	42.4	99.8	99.8	12.2	12.1	100.8	101.7	100	102	98.0	96.2
D3	5.4	5.7	94.7	98.2	41.1	41.5	99.0	99.0	42.2	42.4	99.5	99.5	11.6	12.0	96.7	96.7	108	104	103.8	103.8
FKBG DATA																				
CUR. AV.	5.6				41.6				42.3				12.1				103			
CUM. AV.	5.5				41.5				42.4				12.0				104			
IND. *C	101.8				100.2				99.8				100.8				99.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XII

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 42 LB FOURDRINIER KRAFT LINERBOARD

DECEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT., *A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1	5.2	5.3	98.1	92.8	41.2	41.5	99.3	99.3	42.4	42.6	99.5	100.0	11.9	12.2	97.5	99.2	104	106	98.1	100.0
B1	6.4	6.6	97.0	114.3	41.9	41.9	100.0	101.0	42.0	42.0	100.0	99.0	12.2	11.8	103.4	101.7	101	102	99.0	97.1
C1	5.2	5.4	96.3	92.8	42.1	42.2	99.8	101.4	42.2	42.3	99.8	99.5	12.7	12.4	102.4	105.8	108	109	99.1	103.8
D1	6.4	6.3	101.6	114.3	41.9	42.3	99.0	101.0	42.5	43.0	98.8	100.2	12.8	12.7	100.8	106.7	99	99	100.0	95.2
E1	6.1	5.7	107.0	108.9	41.4	41.5	99.8	99.8	42.1	42.5	99.0	99.3	11.2	12.0	93.3	93.3	110	107	102.8	105.8
F1	6.3	5.6	112.5	112.5	41.6	41.3	100.7	100.2	42.3	42.3	100.0	99.8	11.1	11.6	95.7	92.5	104	105	99.0	100.0
G1	5.6	5.7	98.2	100.0	42.3	42.4	99.8	101.9	42.7	42.8	99.8	100.7	11.9	11.9	100.0	99.2	105	109	96.3	101.0
H1	5.7	5.7	100.0	101.8	41.6	41.6	100.0	100.2	42.6	42.5	100.2	100.5	12.6	12.0	105.0	105.0	105	104	101.0	101.0
I1		5.3				41.2				42.3				12.4				112		
J1	5.2	5.2	100.0	92.8	42.6	42.3	100.7	102.6	42.7	42.4	100.7	100.7	12.2	12.0	101.7	101.7	104	105	99.0	100.0
K1	6.2	6.0	103.3	110.7	41.5	41.5	100.0	100.0	42.2	42.4	99.5	99.5	11.7	11.6	100.9	97.5	100	103	97.1	96.2
L1	4.9	5.1	96.1	87.5	41.0	41.1	99.8	98.8	42.3	42.3	100.0	99.8	11.4	11.6	98.3	95.0	106	108	98.1	101.9
M1	3.8	4.2	90.5	67.8	42.2	42.3	99.8	101.7	42.4	42.5	99.8	100.0	12.0	12.1	99.2	100.0	105	106	99.0	101.0
N1	5.9	6.3	93.6	105.4	41.3	41.8	98.8	99.5	42.2	42.5	99.3	99.5	12.1	12.6	96.0	100.8	101	102	99.0	97.1
O1		6.2				41.2				41.9				12.2				110		
P1	5.8	6.0	96.7	103.6	42.0	41.7	100.7	101.2	42.0	41.7	100.7	99.0	11.9	12.3	96.7	99.2	104	102	102.0	100.0
Q1	6.3	6.3	100.0	112.5	41.3	41.2	100.2	99.5	42.0	41.9	100.2	99.0	12.8	12.3	104.1	106.7	102	106	96.2	98.1
S1	6.8	6.9	98.6	121.4	42.0	42.0	100.0	101.2	42.1	42.1	100.0	99.3	11.6	11.5	100.9	96.7	102	103	99.0	98.1
T1	4.8	4.8	100.0	85.7	42.0	42.1	99.8	101.2	42.2	42.3	99.8	99.5	12.2	11.9	102.5	101.7	106	105	101.0	101.9
U1	5.2	5.3	98.1	92.8	42.1	42.1	100.0	101.4	42.2	42.2	100.0	99.5	12.5	12.3	101.6	104.2	104	105	99.0	100.0
V1		3.6				40.9				42.8				11.7				111		
W1	4.8	5.0	96.0	85.7	41.1	41.1	100.0	99.0	42.5	42.4	100.2	100.2	12.4	12.6	98.4	103.3	100	101	99.0	96.2
Y1		4.8				42.4				42.5				12.3				106		
Z1	5.0	4.8	104.2	89.3	40.9	40.9	100.0	98.6	42.1	42.2	99.8	99.3	12.7	12.3	103.2	105.8	104	109	95.4	100.0
A2	6.7	6.6	101.5	119.6	41.7	41.8	99.8	100.5	42.2	42.4	99.5	99.5	12.2	12.7	96.1	101.7	110	111	99.1	105.8
B2	6.6	6.5	101.5	117.8	41.5	41.5	100.0	100.0	42.0	42.1	99.8	99.0	11.7	12.1	96.7	97.5	98	102	96.1	94.2
C2		5.2				42.3				42.4				11.4				104		
D2		5.2				41.6				42.8				11.2				106		
E2		3.0				41.0				43.1				12.2				108		
G2	6.5	5.6	116.1	116.1	41.5	41.4	100.2	100.0	42.1	42.3	99.5	99.3	11.3	11.2	100.9	94.2	93	98	94.9	89.4
H2		5.9				42.2				43.2				12.1				110		
I2	4.7	4.9	95.9	83.9	42.1	42.0	100.2	101.4	42.2	42.1	100.2	99.5	11.5	11.3	101.8	95.8	111	107	103.7	106.7
J2	4.8	5.0	96.0	85.7	41.5	41.6	99.8	100.0	42.9	42.8	100.2	101.2	11.5	11.5	100.0	95.8	106	106	100.0	101.9
K2	3.5	3.6	97.2	62.5	42.6	42.3	100.7	102.6	43.0	42.7	100.7	101.4	13.3	12.8	103.9	110.8	99	99	100.0	95.2
M2	5.9	6.0	98.3	105.4	41.8	42.1	99.3	100.7	42.7	43.0	99.3	100.7	13.8	13.5	102.2	115.0	98	98	100.0	94.2
N2	5.2	5.0	104.0	92.8	41.6	41.7	99.8	100.2	42.8	43.0	99.5	100.9	12.3	12.4	99.2	102.5	96	96	100.0	92.3
O2	6.0	5.9	101.7	107.1	41.5	41.6	99.8	100.0	42.3	42.4	99.8	99.8	12.0	12.0	100.0	100.0	111	113	98.2	106.7
P2	6.6	6.4	103.1	117.8	42.2	42.0	100.5	101.7	42.3	42.1	100.5	99.8	11.5	11.6	99.1	95.8	101	101	100.0	97.1
Q2	4.9	5.3	92.4	87.5	42.6	42.6	100.0	102.6	43.0	43.0	100.0	101.4	12.6	12.4	101.6	105.0	104	111	93.7	100.0
R2	5.9	5.9	100.0	105.4	42.1	42.1	100.0	101.4	42.2	42.2	100.0	99.5	12.1	11.7	103.4	100.8	104	102	102.0	100.0
T2	5.6	5.6	100.0	100.0	41.5	41.5	100.0	100.0	42.5	42.5	100.0	100.2	13.4	12.8	104.7	111.7	102	103	99.0	98.1
V2		5.0				41.6				42.8				12.0				118		
W2	4.7	5.3	88.7	83.9	41.1	41.3	99.5	99.0	42.5	42.4	100.2	100.2	11.0	10.9	100.9	91.7	108	105	102.8	103.8
X2	5.8	5.8	100.0	103.6	41.9	42.0	99.8	101.0	42.0	42.1	99.8	99.0					103	102	101.0	99.0
Z2		5.5				42.0				42.1				12.6				107		
A3	4.9	5.1	96.1	87.5	41.5	41.6	99.8	100.0	42.8	42.8	100.0	100.9	12.0	12.2	98.4	100.0	96	96	100.0	92.3
B3	5.1	5.1	100.0	91.1	41.5	41.1	101.0	100.0	42.7	42.3	100.9	100.7	11.8	12.4	95.2	98.3	106	106	100.0	101.9
C3	5.9	5.9	100.0	105.4	41.6	41.5	100.2	100.2	42.5	42.4	100.2	100.2	12.2	12.1	100.8	101.7	101	102	99.0	97.1
D3	5.7	5.7	100.0	101.8	41.1	41.5	99.0	99.0	42.0	42.4	99.0	99.0	11.7	12.0	97.5	97.5	109	104	104.8	104.8
FKBG DATA																				
CUR. AV.	5.6				41.7				42.4				12.1				103			
CUM. AV.	5.6				41.5				42.4				12.0				104			
IND. *C	100.0				100.5				100.0				100.8				99.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XIII

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 69 LB FOURDRINIER KRAFT LINERBOARD

OCTOBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT., *A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
D1	6.9	6.5	106.2	111.3	68.9	68.6	100.4	100.6	69.6	69.6	100.0	100.3	21.0	21.6	97.2	106.1	133	132	100.8	95.0
E1		5.8				68.0				69.5				20.0				138		
F1	7.4	6.7	110.4	119.4	68.9	68.6	100.4	100.6	69.2	69.4	99.7	99.7	18.4	19.0	96.8	92.9	148	141	105.0	105.7
H1	6.4	6.4	100.0	103.2	68.6	68.5	100.1	100.1	69.6	69.6	100.0	100.3	19.4	19.2	101.0	98.0	145	149	97.3	103.6
J1	6.7	6.4	104.7	108.1	69.2	69.6	99.4	101.0	69.4	69.8	99.4	100.0	19.7	19.5	101.0	99.5	136	137	99.3	97.1
K1	6.9	6.6	104.5	111.3	68.9	68.6	100.4	100.6	69.6	69.4	100.3	100.3	19.4	19.8	98.0	98.0	138	137	100.7	98.6
M1	5.2	5.0	104.0	83.9	69.1	69.2	99.8	100.9	69.4	69.5	99.8	100.0	19.3	19.0	101.6	97.5	143	140	102.1	102.1
N1	7.7	7.5	102.7	124.2	69.3	69.0	100.4	101.2	69.4	69.2	100.3	100.0	21.1	21.6	97.7	106.6	137	138	99.3	97.8
O1	6.5	6.4	101.6	104.8	67.6	67.7	99.8	98.7	68.5	68.7	99.7	98.7	20.6	20.8	99.0	104.0	146	144	101.4	104.3
P1	6.5	7.0	92.8	104.8	68.9	68.4	100.7	100.6	68.9	68.4	100.7	99.3	20.9	20.0	104.5	105.6	138	136	101.5	98.6
Q1	6.9	6.5	106.2	111.3	67.8	67.9	99.8	99.0	68.5	68.8	99.6	98.7	20.6	20.6	100.0	104.0	144	148	97.3	102.8
S1	7.7	8.0	96.2	124.2	68.8	68.8	100.0	100.4	69.0	69.0	100.0	99.4	20.0	19.6	102.0	101.0	134	136	98.5	95.7
U1	5.8	5.8	100.0	93.5	69.3	69.2	100.1	101.2	69.5	69.4	100.1	100.1	20.0	20.0	100.0	101.0	142	141	100.7	101.4
V1		3.7				67.6				70.6				19.7				160		
Z1	5.0	4.8	104.2	80.6	67.3	67.1	100.3	98.2	69.3	69.3	100.0	99.8		20.0			145	143	101.4	103.6
A2	7.2	7.1	101.4	116.1	68.9	69.1	99.7	100.6	69.4	69.7	99.6	100.0	20.4	20.2	101.0	103.0	144	145	99.3	102.8
C2		5.4				69.2				69.4				18.0				142		
E2		3.8				67.3				70.2				20.0				142		
G2	7.0	6.8	102.9	112.9	68.5	68.2	100.4	100.0	69.1	68.9	100.3	99.6	19.2	18.8	102.1	97.0	133	130	102.3	95.0
I2	6.3	6.2	101.6	101.6	68.9	69.0	99.8	100.6	69.1	69.2	99.8	99.6	19.7	19.2	102.6	99.5	140	141	99.3	100.0
J2	7.3	7.1	102.8	117.7	68.5	68.4	100.1	100.0	68.8	68.9	99.8	99.1	18.9	18.7	101.1	95.4	149	148	100.7	106.4
K2	4.4	4.6	95.6	71.0	67.9	68.4	99.3	99.1	68.5	69.0	99.3	98.7	21.1	20.6	102.4	106.6	139	139	100.0	99.3
L2	5.8	5.6	103.6	93.5	67.8	68.2	99.4	99.0	69.3	69.8	99.3	99.8	18.5	18.8	98.4	93.4	143	140	102.1	102.1
O2	6.0	6.0	100.0	96.8	68.2	68.3	99.8	99.6	69.6	69.6	100.0	100.3	20.0	20.4	98.0	101.0	144	143	100.7	102.8
Q2	6.3	6.1	103.3	101.6	69.6	69.6	100.0	101.6	70.2	70.2	100.0	101.2	20.6	20.6	100.0	104.0	141	142	99.3	100.7
R2	6.8	6.8	100.0	109.7	69.1	69.0	100.1	100.9	69.3	69.2	100.1	99.8	19.1	19.2	99.5	96.5	135	141	95.7	96.4
V2	5.6	5.7	98.2	90.3	68.9	68.2	101.0	100.6	70.6	69.7	101.3	101.7	19.8	20.0	99.0	100.0	141	144	97.9	100.7
W2	6.6	6.4	103.1	106.4	68.5	68.4	100.1	100.0	69.4	69.5	99.8	100.0	19.0	18.3	103.8	96.0	146	140	104.3	104.3
X2		5.8				68.9				69.1								139		
Z2	5.8	5.6	103.6	93.5	68.7	69.0	99.6	100.3	68.9	69.2	99.6	99.3	23.1	20.1	114.9	116.7	138	148	93.2	98.6
A3	6.8	6.7	101.5	109.7	69.2	69.0	100.3	101.0	70.0	69.8	100.3	100.9	19.9	21.3	93.4	100.5	135	134	100.7	96.4
B3	5.9	5.4	109.2	95.2	68.1	67.8	100.4	99.4	69.5	69.5	100.0	100.1	20.5	20.2	101.5	103.5	139	140	99.3	99.3
C3	6.6	6.3	104.8	106.4	68.6	68.6	100.0	100.1	69.5	69.7	99.7	100.1	20.8	20.4	102.0	105.0	137	137	100.0	97.8
FKBG DATA																				
CUR. AV.	6.4				68.6				69.3				20.0				140			
CUM. AV.	6.2				68.5				69.4				19.8				140			
INC. *C	103.2				100.1				99.8				101.0				100.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XIV

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 69 LB FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT., *A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
C1	6.9	6.5	106.2	111.3	68.9	68.6	100.4	100.6	69.6	69.6	100.0	100.3	21.9	21.5	101.9	110.0	130	132	98.5	92.8
E1		5.9				68.1				69.5				20.0				138		
F1		6.8				68.6				69.4				18.9				142		
H1	6.3	6.4	98.4	101.6	68.5	68.5	100.0	100.0	69.6	69.6	100.0	100.3	19.8	19.2	103.1	99.5	145	148	98.0	103.6
J1	6.3	6.4	98.4	101.6	69.3	69.6	99.6	101.2	69.5	69.8	99.6	100.1	20.0	19.5	102.6	100.5	136	137	99.3	97.1
K1	6.9	6.6	104.5	111.3	68.7	68.6	100.1	100.3	69.4	69.5	99.8	100.0	19.4	19.8	98.0	97.5	140	137	102.2	100.0
M1	5.0	5.1	98.0	80.6	69.2	69.2	100.0	101.0	69.5	69.4	100.1	100.1	19.1	19.2	99.5	96.0	139	140	99.3	99.3
N1	7.6	7.6	100.0	122.6	69.4	69.0	100.6	101.3	69.5	69.2	100.4	100.1	22.0	21.6	101.8	110.6	137	138	99.3	97.8
O1	6.6	6.4	103.1	106.4	67.4	67.7	99.6	98.4	68.3	68.7	99.4	98.4	20.5	20.8	98.6	103.0	143	144	99.3	102.1
P1	6.4	7.0	91.4	103.2	68.7	68.4	100.4	100.3	68.7	68.4	100.4	99.0	20.3	20.1	101.0	102.0	140	136	102.9	100.0
Q1	6.5	6.6	98.5	104.8	68.0	67.9	100.1	99.3	69.0	68.8	100.3	99.4	21.0	20.6	101.9	105.5	132	147	89.8	94.3
S1	7.8	8.0	97.5	125.8	68.9	68.8	100.1	100.6	69.1	69.0	100.1	99.6	18.9	19.7	95.9	95.0	134	135	99.2	95.7
U1	5.7	5.8	98.3	91.9	69.2	69.2	100.0	101.0	69.4	69.4	100.0	100.0	19.9	20.0	99.5	100.0	146	141	103.5	104.3
V1		3.6				67.6				70.6				19.6				161		
Z1	4.9	4.8	102.1	79.0	67.2	67.1	100.1	98.1	69.3	69.3	100.0	99.8	20.1	20.0	100.5	101.0	134	143	93.7	95.7
A2	6.8	7.1	95.8	109.7	68.7	69.1	99.4	100.3	69.5	69.7	99.7	100.1	19.8	20.2	98.0	99.5	141	145	97.2	100.7
C2		5.4				69.3				69.5				18.1				142		
E2		3.8				67.2				70.2				20.0				142		
G2	7.8	6.8	114.7	125.8	68.4	68.2	100.3	99.8	68.4	68.9	99.3	98.6	19.6	18.8	104.2	98.5	129	130	99.2	92.1
I2	6.6	6.2	106.4	106.4	68.9	69.0	99.8	100.6	69.1	69.2	99.8	99.6	18.6	19.2	96.9	93.5	146	141	103.5	104.3
J2	6.9	7.1	97.2	111.3	68.5	68.4	100.1	100.0	69.2	68.9	100.4	99.7	18.6	18.7	99.5	93.5	152	148	102.7	108.6
K2	4.2	4.6	91.3	67.7	67.7	68.4	99.0	98.8	68.3	69.0	99.0	98.4	21.0	20.7	101.4	105.5	140	139	100.7	100.0
L2	5.7	5.6	101.8	91.9	67.8	68.2	99.4	99.0	69.4	69.8	99.4	100.0	18.9	18.7	101.1	95.0	136	140	97.1	97.1
O2	6.2	6.0	103.3	100.0	68.4	68.3	100.1	99.8	69.6	69.6	100.0	100.3	20.6	20.4	101.0	103.5	139	142	97.9	99.3
Q2	6.5	6.1	106.6	104.8	69.6	69.6	100.0	101.6	70.2	70.2	100.0	101.2	20.6	20.6	100.0	103.5	144	142	101.4	102.8
R2	6.8	6.8	100.0	109.7	69.1	69.0	100.1	100.9	69.3	69.2	100.1	99.8	18.7	19.2	97.4	94.0	139	140	99.3	99.3
V2	5.9	5.7	103.5	95.2	68.4	68.2	100.3	99.8	69.8	69.8	100.0	100.6	20.2	20.0	101.0	101.5	140	144	97.2	100.0
W2	6.3	6.4	98.4	101.6	68.4	68.4	100.0	99.8	69.5	69.5	100.0	100.1	18.5	18.3	101.1	93.0	140	140	100.0	100.0
X2		5.8				68.9				69.1								139		
Z2		5.6				69.0				69.2				20.4				146		
A3	6.6	6.7	98.5	106.4	68.5	69.0	99.3	100.0	69.4	69.8	99.4	100.0	20.2	21.1	95.7	101.5	134	134	100.0	95.7
B3	5.5	5.4	101.8	88.7	68.0	67.8	100.3	99.3	69.7	69.6	100.1	100.4	20.3	20.2	100.5	102.0	140	140	100.0	100.0
C3		6.4				68.6				69.7				20.5				137		
FKBG DATA																				
CUR. AV.	6.3				68.6				69.3				19.9				139			
CUM. AV.	6.2				68.5				69.4				19.9				140			
IND. *C	101.6				100.1				99.8				100.0				99.3			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XV

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 69 LB FOURDRINIER KRAFT LINERBOARD

DECEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
01	6.9	6.5	106.2	111.3	68.7	68.6	100.1	100.1	69.4	69.5	99.8	100.0	21.2	21.6	98.1	106.5	131	132	99.2	93.6
E1	6.5	6.0	108.3	104.8	68.5	68.1	100.6	99.8	69.5	69.4	100.1	100.1	20.1	20.1	100.0	101.0	141	138	102.2	100.7
F1	7.1	6.8	104.4	114.5	68.8	68.6	100.3	100.3	69.4	69.4	100.0	100.0	18.5	18.9	97.9	93.0	154	142	108.4	110.0
H1	6.4	6.4	100.0	103.2	68.6	68.5	100.1	100.0	69.6	69.6	100.0	100.3	19.4	19.2	101.0	97.5	152	148	102.7	108.6
J1	7.0	6.3	111.1	112.9	69.5	69.6	99.8	101.3	69.7	69.8	99.8	100.4	20.0	19.6	102.0	100.5	134	137	97.8	95.7
K1	6.9	6.7	103.0	111.3	69.0	68.6	100.6	100.6	69.7	69.5	100.3	100.4	20.4	19.7	103.6	102.5	134	138	97.1	95.7
M1	5.1	5.1	100.0	82.2	69.0	69.2	99.7	100.6	69.3	69.5	99.7	99.8	19.4	19.2	101.0	97.5	142	139	102.2	101.4
N1	7.5	7.6	98.7	121.0	68.7	69.1	99.4	100.1	68.9	69.2	99.6	99.3	21.5	21.6	99.5	108.0	137	138	99.3	97.8
C1	6.4	6.5	98.5	103.2	67.7	67.7	100.0	98.7	68.7	68.6	100.1	99.0	19.0	20.8	91.3	95.5	142	144	98.6	101.4
P1	6.9	6.9	100.0	111.3	69.0	68.4	100.9	100.6	69.0	68.4	100.9	99.4	19.9	20.1	99.0	100.0	136	137	99.3	97.1
Q1	6.9	6.6	104.5	111.3	68.1	67.9	100.3	99.3	68.8	68.8	100.0	99.1	20.9	20.7	101.0	105.0	143	145	98.6	102.1
S1		7.9				68.9				69.1				19.6				135		
U1	5.6	5.8	96.6	90.3	69.3	69.2	100.1	101.0	69.5	69.4	100.1	100.1	20.3	20.0	101.5	102.0	139	141	98.6	99.3
V1		3.6				67.6				70.6				19.6				161		
Z1	4.9	4.8	102.1	79.0	67.2	67.2	100.0	98.0	69.3	69.3	100.0	99.8	20.1	20.0	100.5	101.0	134	142	94.4	95.7
A2	7.0	7.1	98.6	112.9	68.9	69.1	99.7	100.4	69.5	69.7	99.7	100.1	20.1	20.2	99.5	101.0	141	144	97.9	100.7
C2		5.4				69.3				69.5				18.2				142		
E2		3.7				67.1				70.1				20.1				142		
G2	7.2	7.0	102.8	116.1	68.2	68.2	100.0	99.4	68.7	68.8	99.8	99.0	19.5	18.9	103.2	98.0	128	130	98.5	91.4
I2	6.7	6.3	106.3	108.1	69.1	69.0	100.1	100.7	69.3	69.2	100.1	99.8	18.9	19.2	98.4	95.0	143	142	100.7	102.1
J2	6.9	7.1	97.2	111.3	68.3	68.4	99.8	99.6	69.0	69.0	100.0	99.4	18.5	18.7	98.9	93.0	151	149	101.3	107.8
K2	4.3	4.6	93.5	69.4	68.7	68.3	100.6	100.1	69.3	68.9	100.6	99.8	21.8	20.7	105.3	109.5	138	139	99.3	98.6
L2	5.6	5.6	100.0	90.3	68.0	68.2	99.7	99.1	69.6	69.8	99.7	100.3	18.6	18.8	98.9	93.5	139	139	100.0	99.3
C2	6.5	6.1	106.6	104.8	68.6	68.3	100.4	100.0	69.6	69.6	100.0	100.3	20.9	20.4	102.4	105.0	138	142	97.2	98.6
G2	6.2	6.2	100.0	100.0	69.6	69.6	100.0	101.4	70.2	70.2	100.0	101.2	19.8	20.6	96.1	99.5	142	142	100.0	101.4
R2	6.5	6.9	94.2	104.8	69.1	69.0	100.1	100.7	69.3	69.2	100.1	99.8		19.1			136	139	97.8	97.1
V2	5.6	5.7	98.2	90.3	68.7	68.3	100.6	100.1	70.3	69.8	100.7	101.3	20.1	20.0	100.5	101.0	143	143	100.0	102.1
W2	6.7	6.4	104.7	108.1	68.7	68.5	100.3	100.1	69.5	69.5	100.0	100.1	19.0	18.3	103.8	95.5	141	140	100.7	100.7
X2		5.8				68.9				69.1								138		
Z2		5.6				69.0				69.2				20.6				145		
A3	7.0	6.7	104.5	112.9	69.4	69.0	100.6	101.2	70.0	69.8	100.3	100.9	20.0	21.0	95.2	100.5	136	134	101.5	97.1
B3	5.3	5.5	96.4	85.5	67.8	67.9	99.8	98.8	69.6	69.6	100.0	100.3	20.1	20.2	99.5	101.0	140	140	100.0	100.0
C3	6.6	6.4	103.1	106.4	69.0	68.6	100.6	100.6	69.9	69.7	100.3	100.7	21.1	20.4	103.4	106.0	133	137	97.1	95.0
FKBG DATA																				
CUR. AV.	6.4				68.7				69.4				20.0				140			
CUM. AV.	6.2				68.6				69.4				19.9				140			
IND. *C	103.2				100.1				100.0				100.5				100.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XVI

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 90 LB FOURDRINIER KRAFT LINERBOARD

OCTOBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
F1	7.1	6.9	102.9	116.4	89.9	89.5	100.4	100.6	90.6	90.4	100.2	100.0	24.6	24.8	99.2	96.1	173	174	99.4	102.4
H1	6.4	6.4	100.0	104.9	89.7	89.5	100.2	100.3	91.0	90.8	100.2	100.4	26.5	25.7	103.1	103.5	163	167	97.6	96.4
M1		5.8				90.5				91.0				26.2				162		
O1	6.4	6.5	98.5	104.9	88.7	88.5	100.2	99.2	90.0	89.7	100.3	99.3	26.7	27.7	96.4	104.3	183	181	101.1	108.3
U1		5.9				90.3				90.6				26.3				164		
V1		3.8				88.1				91.9				25.2				180		
Z1	5.1	5.0	102.0	83.6	87.8	87.7	100.1	98.2	90.3	90.4	99.9	99.7		26.6			157	165	95.2	92.9
A2	6.7	6.9	97.1	109.8	89.4	90.1	99.2	100.0	90.5	91.0	99.4	99.9	26.6	26.1	101.9	103.9	173	171	101.2	102.4
C2		5.4				90.3				90.6				23.9				162		
E2		3.9				88.5				92.2				26.2				177		
I2	6.7	6.2	108.1	109.8	90.0	90.0	100.0	100.7	90.3	90.3	100.0	99.7	26.7	25.0	106.8	104.3	181	170	106.5	107.1
J2	7.0	7.2	97.2	114.8	89.0	89.4	99.6	99.6	89.8	89.9	99.9	99.1	24.7	24.4	101.2	96.5	178	175	101.7	105.3
L2	6.1	6.7	91.0	100.0	89.5	89.5	100.0	100.1	91.1	90.6	100.6	100.6	24.4	24.0	101.7	95.3	163	164	99.4	96.4
Q2	6.6	6.3	104.8	108.2	90.1	90.6	99.4	100.8	90.9	91.4	99.4	100.3	27.2	27.2	100.0	106.2	170	170	100.0	100.6
V2	5.8	6.0	96.7	95.1	90.1	89.4	100.8	100.8	92.1	91.1	101.1	101.6	26.5	26.6	99.6	103.5	160	169	94.7	94.7
W2	6.3	6.5	96.9	103.3	89.4	89.3	100.1	100.0	90.8	90.6	100.2	100.2	24.6	24.1	102.1	96.1	171	166	103.0	101.2
Z2	5.5	5.7	96.5	90.2	89.2	90.2	98.9	99.8	89.5	90.6	98.8	98.8	30.1	25.9	116.2	117.6	167	172	97.1	98.8
B3	6.0	5.6	107.1	98.4	88.8	88.6	100.2	99.3	90.6	90.7	99.9	100.0	26.0	26.2	99.2	101.6	168	164	102.4	99.4
C3		6.6				89.6				90.8				27.0				164		
FKBG DATA																				
CUR. AV.	6.3				89.4				90.6				26.2				170			
CUM. AV.	6.1				89.4				90.6				25.6				169			
IND. *D	103.3				100.0				100.0				102.3				100.6			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XVII

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 90 LB FOURDRINIER KRAFT LINERBOARD

NOVEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
F1		7.0				89.6				90.4				24.8				174		
H1	6.2	6.4	96.9	100.0	89.4	89.5	99.9	100.0	90.9	90.9	100.0	100.3	26.8	25.8	103.9	104.3	162	166	97.6	95.8
K1	8.2			132.2	89.9			100.6	89.5			98.8	25.9			100.8	155			91.7
M1		5.8				90.5				91.0				26.2				162		
O1	6.7	6.5	103.1	108.1	89.2	88.5	100.8	99.8	90.3	89.7	100.7	99.7	27.4	27.6	99.3	106.6	176	181	97.2	104.1
U1		5.9				90.3				90.6				26.3				164		
V1		3.9				88.2				91.9				25.0				177		
Z1		5.0				87.7				90.4				26.6				164		
A2	7.1	6.9	102.9	114.5	90.7	90.0	100.8	101.4	91.4	90.9	100.6	100.9	23.3	26.2	88.9	90.7	171	172	99.4	101.2
C2		5.4				90.2				90.6				24.4				164		
E2		4.0				88.6				92.2				26.4				176		
I2	5.9	6.2	95.2	95.2	89.9	90.0	99.9	100.6	90.2	90.3	99.9	99.6	24.4	25.2	96.8	94.9	176	172	102.3	104.1
J2	7.2	7.2	100.0	116.1	89.3	89.3	100.0	99.9	89.9	89.9	100.0	99.2	24.4	24.4	100.0	94.9	184	175	105.1	108.9
L2	6.5	6.7	97.0	104.8	89.2	89.5	99.7	99.8	90.4	90.6	99.8	99.8	24.1	24.0	100.4	93.8	163	164	99.4	96.4
Q2	6.4	6.3	101.6	103.2	90.8	90.5	100.3	101.6	91.6	91.3	100.3	101.1	27.2	27.2	100.0	105.8	167	170	98.2	98.8
V2	5.9	6.0	98.3	95.2	90.1	89.4	100.8	100.8	92.0	91.3	100.8	101.5	26.7	26.5	100.8	103.9	160	168	95.2	94.7
W2	6.7	6.5	103.1	108.1	89.5	89.3	100.2	100.1	90.6	90.6	100.0	100.0	24.2	24.1	100.4	94.2	161	166	97.0	95.3
Z2		5.6				90.1				90.4				26.5				170		
B3	5.5	5.7	96.5	88.7	88.7	88.7	100.0	99.2	90.9	90.7	100.2	100.3	26.5	26.2	101.1	103.1	164	164	100.0	97.0
C3		6.6				89.6				90.8				27.0				164		

FKBG DATA

CUR. AV.	6.6				89.7				90.7				25.5				167			
CUM. AV.	6.2				89.4				90.6				25.7				169			
INC. *C	106.4				100.3				100.1				99.2				98.8			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XVIII

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 90 LB FOURDRINIER KRAFT LINERBOARD

DECEMBER, 1979

	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT., *A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
CODE	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
F1	7.7	7.0	110.0	124.2	90.1	89.6	100.6	100.8	90.2	90.4	99.8	99.6	24.8	24.8	100.0	96.5	171	174	98.3	101.2
H1	6.6	6.3	104.8	106.4	89.9	89.5	100.4	100.6	91.1	90.8	100.3	100.6	26.4	25.8	102.3	102.7	176	165	106.7	104.1
K1		8.2				89.9				89.5				25.9				155		
M1		5.8				90.5				91.0				26.2				162		
O1		6.5				88.6				89.8				27.6				181		
U1		5.9				90.3				90.6				26.3				164		
V1		4.3				88.4				91.8				24.8				178		
Z1		5.0				87.7				90.4				26.6				164		
A2		6.9				90.0				90.9				26.0				172		
C2		5.3				90.3				90.6				24.4				164		
E2		3.7				88.4				92.3				26.1				180		
I2	6.6	6.2	106.4	106.4	90.0	89.9	100.1	100.7	90.3	90.2	100.1	99.7	24.9	25.2	98.8	96.9	172	172	100.0	101.8
J2	7.2	7.2	100.0	116.1	89.4	89.3	100.1	100.0	90.0	89.9	100.1	99.3	24.2	24.4	99.2	94.2	176	176	100.0	104.1
L2	6.6	6.6	100.0	106.4	89.7	89.5	100.2	100.3	90.9	90.6	100.3	100.3	23.9	24.0	99.6	93.0	163	163	100.0	96.4
Q2	6.5	6.3	103.2	104.8	91.1	90.5	100.7	101.9	91.9	91.3	100.6	101.4	26.7	27.2	98.2	103.9	171	170	100.6	101.2
V2	5.8	5.9	98.3	93.5	89.7	89.5	100.2	100.3	91.7	91.4	100.3	101.2	27.0	26.5	101.9	105.0	157	168	93.4	92.9
W2	6.9	6.5	106.2	111.3	89.6	89.4	100.2	100.2	90.5	90.6	99.9	99.9	24.2	24.2	100.0	94.2	164	167	98.2	97.0
Z2		5.6				90.1				90.4				26.5				170		
B3	5.8	5.7	101.8	93.5	88.7	88.7	100.0	99.2	90.7	90.7	100.0	100.1	27.1	26.3	103.0	105.4	162	164	98.8	95.8
C3		6.6				89.6				90.8				27.0				164		
FKBG DATA																				
CUR. AV.	6.6				89.8				90.8				25.5				168			
CUM. AV.	6.2				89.4				90.6				25.7				169			
IND. *D	106.4				100.4				100.2				99.2				99.4			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

Data submitted by the participating mills relative to conditioning and testing environments are summarized in Table XIX. The procedures used in calculating adjusted basis weight, cumulative machine averages, machine factors, machine indexes, and F.K.B.G. indexes are described in the Appendix.

It should be explained that the number of machines for which data are compiled in each table for a specified month varies for these reasons: a machine must have (a) produced at least 500 tons of the pertinent grade weight during the specified month, or (b) produced 500 tons of the pertinent grade weight during any one or more of the 12 months prior to the specified month (so that a cumulative average is available), to be included in a given table.

TABLE XIX

DATA ON CONDITIONING AND TESTING ENVIRONMENTS

OCTOBER, NOVEMBER, DECEMBER, 1979

	Conditioning Environment				Testing Environment
	Are Quality Samples	Procedure			Are Quality Samples Tested
Code	Conditioned Before Testing?	Time	Temp., °F	RH, %	Under Controlled Conditions of Temperature & Humidity?
A1	No	--	--	--	No
B1	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
C1	Yes	15 Min	--	--	Yes: 73 ± 3.5°F; 50 ± 3% RH
D1	Yes	10 Min	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
E1	No	--	--	--	Yes: 73 ± 3.5°F; 50 ± 2% RH
F1	No	--	--	--	Yes: 72 ± 2°F; 50 ± 1% RH
G1	No	--	--	--	No
H1	No	--	--	--	No
I1	No	--	--	--	No
J1	No	--	--	--	Yes: 72 ± 2°F; 50 ± 2% RH
K1	No	--	--	--	Yes: 73 ± 5°F; 50 ± 5% RH
L1	No	--	--	--	No
M1	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
N1	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
O1	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
P1	No	--	--	--	No
Q1	Yes	15 Min	--	--	Yes: 73 ± 2°F; 50 ± 1% RH
R1	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
S1	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
T1	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
U1	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
V1	No data submitted for this quarter				
W1	No	--	--	--	Yes: 73 ± 3°F; 50 ± 1% RH
X1	No	--	--	--	Yes: 73 ± 3.5°F; 50 ± 2% RH
Y1	No	--	--	--	Yes: 72 ± 2°F; 50 ± 2% RH
Z1	No	--	--	--	No
A2	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
B2	No	--	--	--	No
C2	No data submitted for this quarter				
D2	No data submitted for this quarter				
E2	No data submitted for this quarter				
F2	Yes	10 Min	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
G2	No	--	--	--	No
H2	No data submitted for this quarter				
I2	No	--	--	--	Yes: 75 ± 5°F; 50 ± 5% RH
J2	No	--	--	--	No
K2	No	--	--	--	Yes: 70 ± 2°F; 50 ± 2% RH
L2	No	--	--	--	No
M2	Yes	20 Min	--	--	Yes: 72 ± 3.5°F; 50 ± 2% RH
N2	No	--	--	--	Yes: 72 ± 3°F; 50 ± 2% RH
O2	No	--	--	--	Yes: 73 ± 3.5°F; 50 ± 2% RH
P2	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
Q2	No	--	--	--	No
R2	No	--	--	--	No
S2	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
T2	No	--	--	--	No
U2	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
V2	No	--	--	--	No
W2	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
X2	No	--	--	--	No
Y2	Yes	10 Min	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
Z2	No	--	--	--	No
A3	No	--	--	--	Yes: 72 ± 3°F; 50 ± 2% RH
B3	No	--	--	--	No
C3	No	--	--	--	Yes: 73 ± 5°F; 50 ± 5% RH
D3	No	--	--	--	No

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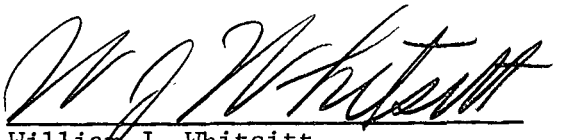
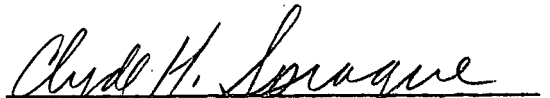


William J. Whitsitt
Research Associate
Engineering Division

Approved by



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APPENDIX

NOTES A, B, C, AND D, USED IN TABULATIONS OF MILL DATA

Notes A, B, C, and D, used in the tables of mill data are given below; these notes define the procedure used in calculating adjusted basis weight, machine factor, machine index, and F.K.B.G. index. It should be stressed that each formula is applicable only to a specific physical property of a specific grade weight of linerboard.

Note A: Adjusted basis weight (ABW) = reported weight (RBW) adjusted to moisture content of 7.8%:

$$ABW = RBW \left[\frac{(100 - \text{reported moisture content, \%})}{(100 - 7.8)}\right]$$

Note B: Machine factor (%) $= \left[\frac{\text{Current machine average}}{\text{Cumulative machine average}}\right] \cdot 100$ where

$$\text{Cumulative machine average} = \sum \frac{\text{CMA's}^{a} \text{ for previous 12 months excluding CMA for current month}}{12}$$

Note C: Machine index (%) $= \left[\frac{\text{Current machine average}}{\text{Cumulative F.K.B.G. average}}\right] \cdot 100$ where

$$\text{Cumulative F.K.B.G. average} = \sum \frac{\text{CFKBGA's}^{b} \text{ for previous 12 months excluding CFKBGA for current month}}{12}$$

Note D: F.K.B.G. index (%) $= \left[\frac{\text{Current F.K.B.G. average}}{\text{Cumulative F.K.B.G. average}}\right] \cdot 100$ where

$$\text{Current F.K.B.G. average} = \sum \frac{\text{CMA's}^{a} \text{ for current month for all machines}}{\text{Number of machines}}$$

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[a] CMA = current machine average for a specific physical property of a specific linerboard grade weight obtained during a given month on a specific machine.

[b] CFKBGA = current F.K.B.G. average for a specific physical property of a specific linerboard grade weight obtained during a given month.